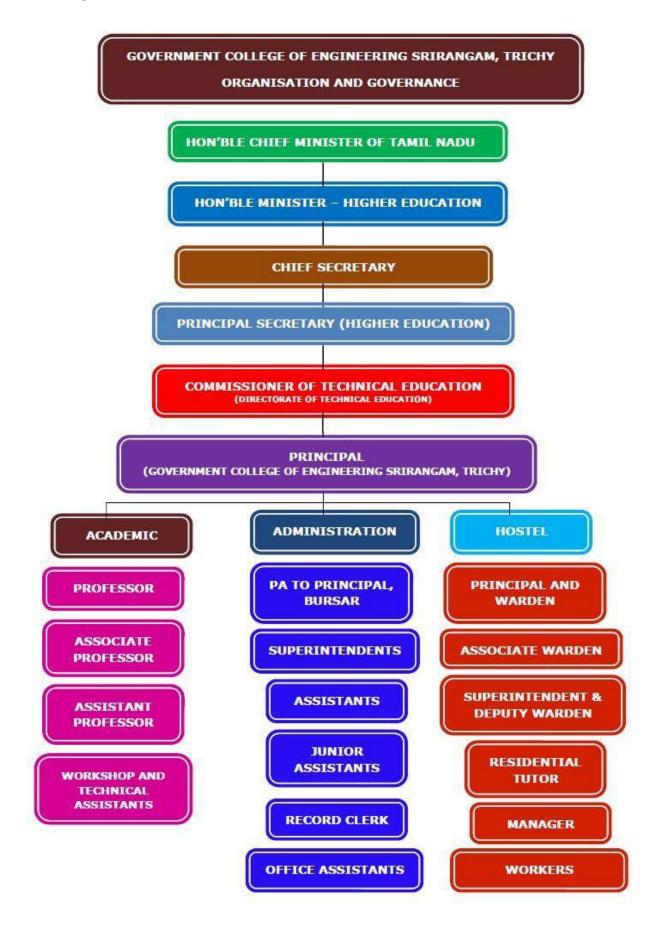
| _ | AICTE File No                      | Southern/1-9318740170/2021/EOA               |  |  |
|---|------------------------------------|--|--|--|
|   |                                    |  |  |  |
|   | Date & Period of Last Approval     | Date: 25-06-2021                             |  |  |
|   |                                    | Period of Last Approval : 2021-2022          |  |  |
| 2 | Name of the Institution            | Government College of Engineering Srirangam  |  |  |
|   | Address of the Institution         | Sethurappatti, Tiruchirappalli, Tamilnadu,   |  |  |
|   |                                    | Pincode: 620012.                             |  |  |
|   | State                              | Tamil Nadu                                   |  |  |
|   | Phone Number with STD Code         | 9488008656                                   |  |  |
|   | Office hours at the Institution    | 10.00 AM – 5.30 PM                           |  |  |
|   | Office nours at the Institution    | 10.00  AW - 5.50  PW                         |  |  |
|   | Academic hours at the Institution  | 9.00 AM – 4.45 PM                            |  |  |
|   | E – mail                           | principal@gces.edu.in                        |  |  |
|   | Website                            | www.gces.edu.in                              |  |  |
|   | Nearest Railway Station            | Tiruchirappalli Junction                     |  |  |
|   | Nearest Airport                    | Tiruchirappalli Airport                      |  |  |
| 3 | Type of Institution                | Government                                   |  |  |
|   | Category (1) of the Institution    | Non Minority                                 |  |  |
|   | Category (2) of the Institution    | Co – Education                               |  |  |
| 4 | Name of the affiliating University | Anna University Chennai                      |  |  |
|   | Address                            | Sardar Patel Road, Guindy, Chennai – 600 025 |  |  |
|   | Website                            | www.annauniv.edu                             |  |  |
|   | Latest affiliation period          | 2021-2022                                    |  |  |
| 5 | Name of Principal                  | Dr. V.M.Shanthi                              |  |  |
|   | Exact Designation                  | Principal                                    |  |  |
|   | Phone number with STD Code         | 8903127517                                   |  |  |
|   | Email                              | principal@gces.edu.in                        |  |  |
|   | Highest Degree                     | Ph.D.  |  |  |
|   | Field of Specialization            | Civil Engineering                            |  |  |

## MANDATORY DISCLOSURE (as on 01.02.2022)



# 7. STUDENT FEEDBACK MECHANISM ON INSTITUTIONAL GOVERNANCE / FACULTY PERFORMANCE

- a) At the end of every semester, faculty teaching performance is being evaluated through feedback forms by students for all subjects and follow up action will be taken.
- b) During Class Committee Meetings (CCM) and at the time of student counseling student evaluate institutional governance.

# 8. GRIEVANCE REDRESSAL MECHANISM FOR FACULTY, STAFF AND STUDENTS

- a) HOD Meetings
- b) Department Meetings
- c) Retest are conducted for the students
- d) Student Counselling

#### 9. (a) COMPLAINTS CUM REDRESSAL COMMITTEE

| NAME  | DESIGNATION  |
|---|--------------|
| Dr.V.M.Shanthi, Principal   | Chair Person |
| Mrs.R.Sarojini, HoD/ECE   | Member       |
| Sister Pragashi OSM, Administrator<br>(RN&RM), Holy Family Hansenorium,<br>Fathima Nagar, Trichy-12 | NGO Member   |
| Dr.R.Varthini, AP/MECH  | Member       |
| Dr.S.Nagarajan, ASP(CAS)/CSE  | Member       |
| Dr.P.Manivannan, AP/Maths   | Member       |
| Mrs.M.Banupriya, AP/CIVIL   | Member       |

## (b) SC/ST COMMITTEE

| NAME                               | DESIGNATION |
|------------------------------------|-------------|
| Dr.V.M.Shanthi, Principal          | Chairperson |
| Mrs.R.Sarojini, HoD/ECE            | Member      |
| Mrs.P.Vanitha Muthu, HoD/CSE       | Member      |
| Mr.J.Kalidass, AP/CSE              | Member      |
| Mr.D.Kalaiarasan, AP/ECE           | Member      |
| Mrs.J.Valarmathi, Superintendent   | Member      |
| Mr.M.Senthil Kumar, Lab Asst./MECH | Member      |

## (c) SEXUAL HARASSMENT REDRESSAL COMMITTEE

| NAME  | DESIGNATION |
|---|-------------|
| Dr.V.M.Shanthi, Principal   | Chairman    |
| Sister Pragashi OSM, Administrator<br>(RN&RM), Holy Family Hansenorium,<br>Fathima Nagar, Trichy-12 | NGO Member  |
| Mrs.P.Vanitha Muthu, HoD/CSE  | Member      |
| Mrs.G.Sheeba, AP /ECE   | Member      |
| Ms.M.Dhanalakshmi, AP/Chemistry   | Member      |
| Mrs.M.Bhavani, AP/EEE   | Member      |
| Mrs. K.Sadhana, AP/CIVIL  | Member      |

## (d) ANTI-RAGGING COMMITTEE

| NAME  | DESIGNATION    |
|---|----------------|
| Dr.V.M.Shanthi, Principal   | Chairman       |
| Mrs.M.Banupriya, AP/CIVIL   | Member         |
| Mr.K.Manikandan, AP/EEE   | Member         |
| Mr.B.Suresh Kumar, AP/MECH  | Member         |
| Dr.A.Hemamalini, AP/Chemistry   | Member         |
| Mr.P.Kanagaraj, Lab Asst./ECE   | Member         |
| Sister Pragashi OSM, Administrator<br>(RN&RM), Holy Family Hansenorium,<br>Fathima Nagar, Trichy-12 | NGO Member     |
| Mrs.M.Surya, Inspector  | Member         |
| Mrs.P.Sasikumari, Revenue Inspector   | Member         |
| Mr.S.Tamilarasu, III Year CSE   | Student Member |
| Ms.A.Abirami, III Year ECE  | Student Member |
| Mr.P.Thivakaran, Parent Representative  | Member         |

# (e) ANTI-RAGGING SQUAD

| NAME                               | DESIGNATION |
|------------------------------------|-------------|
| Dr.V.M.Shanthi, Principal          | Chairman    |
| Mrs.P.Vanitha Muthu, HoD/CSE       | Member      |
| Mrs.R.Sarojini, HoD/ECE            | Member      |
| Mr.P.Ganesan, HoD/EEE              | Member      |
| Dr.G.Saravanan, HoD/CIVIL          | Member      |
| Mr.N.Ramasubbu, AP/MECH            | Member      |
| Mrs.G.Selvasundari, Lab Asst./MECH | Member      |

#### **10. PROGRAMMES:**

| S.No | Department                                    | Name of the Programme                              | Duration | Approved<br>Student<br>Intake | Year of<br>Starting |
|------|---|--|----------|-------------------------------|---------------------|
| 1    | Civil Engineering                             | B.E. Civil Engineering                             | 4 Years  | 60                            | 2013                |
| 2    | Mechanical Engineering                        | B.E. Mechanical<br>Engineering                     | 4 Years  | 60                            | 2013                |
| 3    | Electrical & Electronics<br>Engineering       | B.E. Electrical &<br>Electronics Engineering       | 4 Years  | 60                            | 2013                |
| 4    | Electronics &<br>Communication<br>Engineering | B.E. Electronics &<br>Communication<br>Engineering | 4 Years  | 60                            | 2013                |
| 5    | Computer Science &<br>Engineering             | B.E. Computer Science &<br>Engineering             | 4 Years  | 60                            | 2013                |

### (a) NAME OF THE PROGRAMMES APPROVED BY AICTE

## (b) NUMBER OF STUDENTS ADMITTED IN LAST THREE YEARS

| S.No | Department                                 | 2018 - 19 | 2019 -20 | 2020-21 |
|------|--|-----------|----------|---------|
| 1    | Civil Engineering                          | 60        | 57       | 53      |
| 2    | Mechanical Engineering                     | 59        | 56       | 59      |
| 3    | Electrical & Electronics<br>Engineering    | 45        | 55       | 57      |
| 4    | Electronics & Communication<br>Engineering | 57        | 56       | 57      |
| 5    | Computer Science & Engineering             | 54        | 52       | 54      |
|      | Total                                      | 275       | 276      | 280     |

# (c) LAST CUT OFF MARKS (BRANCH WISE /COMMUNITY WISE)

| S.No | Department | OC    | BC    | BCM   | MBC   | SC    | SCA   | ST    |
|------|------------|-------|-------|-------|-------|-------|-------|-------|
|      |            | LC    |
| 1    | CIVIL      | 140.5 | 116   | 106.5 | 116   | 121.5 | 138   | -     |
| 2    | MECH       | 147   | 123   | 120   | 127.5 | 111.5 | 85    | 112   |
| 3    | EEE        | 151   | 134   | 140.5 | 131   | 128   | 145.5 | 87.5  |
| 4    | ECE        | 160   | 154.5 | 113   | 139   | 129.5 | 146   | -     |
| 5    | CSE        | 164   | 154.5 | 141.5 | 150   | 146   | 124.5 | 132.5 |

### ACADEMIC YEAR - 2020 - 21

## **ACADEMIC YEAR - 2019 - 20**

| S.No Departme | Department | OC      | BC     | BCM     | MBC     | SC      | SCA     | ST      |
|---------------|------------|---------|--------|---------|---------|---------|---------|---------|
|               |            | LC      | LC     | LC      | LC      | LC      | LC      | LC      |
| 1             | CIVIL      | 172.065 | 164.33 | 160.855 | 163.79  | 165.045 | 160.945 | -       |
| 2             | MECH       | 173.69  | 168.44 | 165.795 | 165.615 | 164.96  | 164.845 | 154.415 |
| 3             | EEE        | 178.77  | 176.08 | 167.265 | 174.065 | 171.9   | 155.415 | -       |
| 4             | ECE        | 184.605 | 180.87 | 178     | 178.21  | 175.47  | 170.23  | -       |
| 5             | CSE        | 186.745 | 185.58 | 186.435 | 186.495 | 178.33  | 179.92  | 167.76  |

#### ACADEMIC YEAR - 2018 - 19

| S.No | Department | OC     | BC     | BCM    | MBC    | SC     | SCA    | ST  |
|------|------------|--------|--------|--------|--------|--------|--------|-----|
|      |            | LC     | LC     | LC     | LC     | LC     | LC     | LC  |
| 1    | CIVIL      | 170.75 | 144.25 | 122.75 | 145.75 | 137.25 | -      | -   |
| 2    | MECH       | 173    | 162.75 | 163.75 | 163.75 | 148    | 118.75 | 150 |
| 3    | EEE        | -      | 166.25 | -      | 159    | 109    | -      | -   |
| 4    | ECE        | 182    | 162.75 | 123    | 169.75 | 117.5  | 154.5  | -   |
| 5    | CSE        | 180.5  | 158.67 | 167    | 169.25 | 149.75 | 162.25 | -   |

# (d) Academic performance for past 3 years (pass %)

| Academic Year | 2018-2019 | 2019-2020 | 2020-2021 |
|---------------|-----------|-----------|-----------|
| UG            | 45.26     | 30.5      | 96.55     |

#### 11. RESEARCH PAPER PUBLISHED IN PEER REVIEWED JOURNALS

| Academic Year       | 2018-2019 | 2019-2020 | 2020-2021 to till date |
|---------------------|-----------|-----------|------------------------|
| Total No .of papers | 12        | 20        | 30                     |

#### **12. PLACEMENT DETAILS**

| Academic<br>Year | Number of<br>Students<br>Placed | Min salary<br>offered (Per ann)<br>Rs. | Max salary<br>offered (Per ann)<br>Rs. | List of few companies visited our campus  |
|------------------|---------------------------------|--|--|---|
| 2018-19          | 117                             | 1.2 lakhs                              | 4.6 lakhs                              | <ol> <li>Resolution Specialist, Amazon<br/>India</li> <li>Gestamp Automotive, Chennai</li> <li>Shizen Energy, Chennai</li> <li>Bharati Cement Pvt Ltd, Chennai.</li> <li>L&amp;T transportation infrastructure<br/>Bial nspr project Kembegowda</li> </ol>  |
| 2019-20          | 139                             | 1.8 lakhs                              | 3.8 lakhs                              | <ol> <li>Plintron global technology pvt ltd<br/>,chennai</li> <li>Transition next gen, bangalore</li> <li>P&amp;C projects Pvt Ltd,</li> <li>Virunthavanam Nagar (NTECL<br/>Township), Vallur, Chennai</li> <li>Abirami Builders, Chengalpattu</li> <li>Schneider electric pvt Ltd., Chennai</li> </ol> |
| 2020-21          | 97                              | 1.8 lakhs                              | 3.2 lakhs                              | <ol> <li>Wise Tech Source, Chennai,</li> <li>Triphase Technologies Pvt. Ltd.,<br/>Bangalore</li> <li>Panacea Medical Technologies Pvt.<br/>Ltd., Bangalore</li> <li>Crypton Technologies, Bangalore</li> <li>Flextronics, Chennai</li> </ol>  |

## **13. FACULTY**

| S.No | Department                                      | Available Staff<br>Members |
|------|---|----------------------------|
| 1    | Civil Engineering                               | 14                         |
| 2    | Mechanical Engineering                          | 13                         |
| 3    | Electrical & Electronics Engineering            | 11                         |
| 4    | Electronics & Communication<br>Engineering      | 13                         |
| 5    | Computer Science & Engineering                  | 13                         |
| 6    | Science and Humanities & General<br>Engineering | 15                         |
|      | Total   | 79                         |

## DEPARTMENT WISE TEACHING FACULTY - DETAILED

| Name of Head of the Institution: I |                             |                                  |               |                      |
|------------------------------------|-----------------------------|----------------------------------|---------------|----------------------|
| Designation                        | PRINCIPAL                   |                                  |               | L                    |
| Date of Birth                      | 25 - 06- 1963               |                                  |               | 12                   |
|                                    | UG                          | PG                               |               | Ph.D.                |
| Qualification                      | B.E. – Civil<br>Engineering | M.E. – Structural<br>Engineering |               | Civil<br>Engineering |
|                                    | Teaching                    | Research                         |               | Industry             |
| Total Experience in Years          | 36 Y                        | 30Y                              |               | 0.5                  |
| Donong nublished                   | National                    |                                  | International |                      |
| Papers published                   | 10                          |                                  | 25            |                      |
|                                    | National                    |                                  | International |                      |
| Papers presented in Conference     | 55                          |                                  | 05            |                      |

## FACULTY PROFILE

https://drive.google.com/file/d/1UioPxmooAoZ5jJLfobqQthiF1GfS4KFe/view?usp=sharing

# 14. INFORMATION ON INFRASTRUCTURE AND OTHER RESOURCES AVAILABLE

| S.No. | Name of the Block                       | Area (Length<br>Width) in sq.m. | Number of Rooms |
|-------|---|---------------------------------|-----------------|
| 1.    | Administrative Block (Class Rooms)      | 100.28                          | 20              |
| 2.    | Administrative Block (Drawing Hall)     | 1059                            | 03              |
| 3.    | Administrative Block( Computer Centers) | 223.76                          | 03              |
| 4.    | Administrative Block( Laboratory)       | 223.7                           | 25              |
| 5.    | Workshop                                | 380                             | 1               |

## (a) LIBRARY

| S.No. | Details | Area   |
|-------|---------|--------|
| 1.    | Library | 528.15 |

## BOOKS

| Sl. No. | Description            | No. of Books<br>(Title) available | No. of Books<br>(Volumes) available |
|---------|------------------------|-----------------------------------|-------------------------------------|
| 1.      | Science and Humanities | 1160                              | 2527                                |
| 2.      | Engineering            | 4392                              | 12178                               |
|         | Total                  | 5552                              | 14705                               |

#### JOURNALS

| SL No   | Name of the Course | No.      | of Journals   |
|---------|--------------------|----------|---------------|
| Sl. No. |                    | National | International |
| 1.      | Civil              | 6        | -             |
| 2.      | Mechanical         | 6        | -             |
| 3.      | EEE                | 6        | -             |
| 4.      | ECE                | 6        | -             |
| 5.      | CSE                | 6        | -             |
|         |                    |          |               |
|         | PG 1               | -        | -             |
|         | PG 2               | -        | -             |
|         |                    |          |               |

#### **E-JOURNALS**

| S. No | Name of the e-Journal<br>Publisher | Total No.<br>of<br>Journals | No. of Journals                            |
|-------|------------------------------------|-----------------------------|--|
| 1.    | DELNET                             | 400 +                       | Civil (49), Mech (25), EEE (30), ECE       |
|       |                                    |                             | (17),CSE (114) and Allied (165)            |
| 2.    | gale.cengage (IESTC)               | 1868 +                      | Civil (35), Mech (66), EEE (48), ECE (12), |
|       |                                    |                             | CSE (71) and Science & Technology (1636)   |

#### NDLI CLUB

#### CLUB Registration Number: INTNNC4PJW9HWMX

Club Patron - Dr.V.M. Shanthi, Principal

Club President-Prof.P.Vanitha Muthu, HoD/CSE

Club Secretary – Dr.C. Smitha, HoD/Chemistry

Club Member-Dr.S.Annie Joice, Assistant Professor/CSE

#### (b) HOSTEL

| S.No. | Details      | Area sq. m | Number of Rooms |
|-------|--------------|------------|-----------------|
| 1.    | Boys Hostel  | 20         | 172             |
| 2.    | Girls Hostel | 20         | 172             |

## (c) LABORATORY AND WORKSHOP

| S.No. | Name of the Laboratory           | Equipments   |  |  |
|-------|----------------------------------|--|--|--|
| 1.    | Engineering Practices Laboratory | <ol> <li>Electrical measuring instruments</li> <li>Hand Drilling Machine</li> <li>Planer</li> <li>Centre lathe</li> <li>Circular Saw</li> <li>Carpentry vice (fitted to work bench)</li> <li>Digital Live-wire detector</li> <li>Demolition Hammer</li> <li>Assorted electronic components for making circuits</li> <li>Assorted components for plumbing Consisting of metallic pipes, plastic pipes, flexible pipes, couplings, unions, elbows, plugs and other fittings.</li> <li>Arc welding transformer with cables and holders</li> <li>Welding booth with exhaust facility</li> <li>Welding accessories like welding shield, chipping hammer, wire brush, etc.</li> <li>Study-purpose items: centrifugal pump, air-conditioner</li> <li>Soldering guns</li> <li>Power Tools: (a) Rotary Hammer</li> <li>Power Tool: Angle Grinder</li> </ol> |  |  |

|    |                                  | 20.      | Oxygen and acetylene gas cylinders, blow pipe and other welding               |
|----|----------------------------------|----------|---|
|    |                                  |          | outfit.   |
|    |                                  |          | Models of industrial trusses, door joints, furniture joints                   |
|    |                                  |          | Hearth furnace, anvil and smithy tools  |
|    |                                  |          | Megger (250V/500V)  |
|    |                                  | 24.      | Jigsaw<br>Home Photometer   |
|    |                                  | 1.       | Viscometer  |
|    |                                  | 2.<br>3. | Velocity of sound and compressibility of liquid-Ultrasonic                    |
|    |                                  | 5.       | interferometer  |
| 2. |                                  | 4.       | Torsion pendulum  |
|    | Physics & Chemistry Laboratory   | 5.       | Thermal conductivity of bad conductor-Lee's Disc                              |
|    |                                  | 6.       | Potentiometer   |
|    |                                  | 7.       | pH Meter  |
|    |                                  | 8.       | Conductivity Meter  |
|    |                                  | 9.       | Spectrophotometer   |
|    |                                  | 1.       | Theodolites   |
|    |                                  | 2.       | Surveyor Compass  |
|    |                                  | 3.       | Survey grade or Hand held GPS   |
|    |                                  | 4.<br>5. | Ranging rods(set)   |
| 3. |                                  | 5.<br>6. | Prismatic Compass<br>Pocket stereoscope                                       |
|    | Surveying Laboratory             | 0.<br>7. | Leveling staff(set)   |
|    |                                  | 8.       | Dumpy level / Filling level   |
|    |                                  | 9.       | Cross staff(set   |
|    |                                  | 10.      | Chains(set)   |
|    |                                  |          | Arrows(set)   |
|    |                                  |          | Total Station   |
|    |                                  | 1.       | Torsion testing machine   |
|    |                                  | 2.       | Mortar cube moulds  |
|    |                                  | 3.       | Le Chateliers apparatus   |
|    |                                  | 4.       | Izod impact testing machine   |
| 4. |                                  | 5.<br>6. | Hardness testing machine-Vickers/Brinell<br>Hardness testing machine-Rockwell |
| 7. | Strength of Materials Laboratory | 0.<br>7. | Extensometer  |
|    |                                  | 8.       | Dial gauges   |
|    |                                  | 9.       | Compressometer  |
|    |                                  |          | Beam deflection test apparatus  |
|    |                                  |          | UTM of minimum 400 KN   |
|    |                                  | 12.      | Vicats apparatus  |
|    |                                  | 1.       | Venturimeter/Orifice meter  |
|    |                                  | 2.       | Submersible pump  |
|    |                                  | 3.       | Rotometer   |
| 5. | Undroulie Engineering Lehenstern | 4.       | Pelton Wheel turbine  |
|    | Hydraulic Engineering Laboratory | 5.       | minor losses  |
|    |                                  | 6.<br>7. | Gear Pump<br>friction factor in pipes   |
|    |                                  | 7.<br>8. | Francis turbines / kaplon turbine Centrifugal Pump                            |
|    |                                  | 9.       | Bernoullis  |
|    |                                  | 1.       | Measuring jar 50mL  |
|    |                                  | 2.       | Volumetric flask  |
|    |                                  | 3.       | Volumetric flask500mL   |
|    |                                  | 4.       | Volumetric flask 250mL  |
|    |                                  | 5.       | Volumetric  |
|    |                                  | 6.       | Volumetric  |
|    |                                  | 7.       | Volumetric flask1000mL  |
|    |                                  | 8.<br>9. | UV and Visible Spectrophotometer<br>Test tubes 20mL                           |
| 6. | Water and Waste Water Analysis   |          | Sterilization   |
| 0. | -                                |          | Refrigerator  |
|    | Laboratory                       |          | Pipette 5mL   |
|    |                                  |          | Pipette 2   |
|    |                                  |          | Pipette 10mL  |
|    |                                  |          | pH meter  |
|    |                                  | 16.      | Nesslers tube 100   |
|    |                                  |          | Nephelometer  |
|    |                                  |          | Muffle furnace  |
|    |                                  |          | Water bath  |
|    |                                  | 20.      | Jar test apparatus  |

| 21.       Imhoff cone         22.       Hot air oven         23.       DO meter         24.       Conical flask 10 mL         25.       Conductivity meter         26.       Compound microscope         27.       COD digester (with 6 heating mantle)         28.       China dish         29.       Burette 50mL with stand         30.       Burette 50mL with stand         31.       BOD incubator         32.       Beaker 500mL         33.       Beaker 100mL         34.       Beaker100mL         35.       Bacteriological incubator         36.       Autoclave         37.       Weighing machine(0.0001g)         38.       Weighing machine(0.0001g)         39.       Veighing machine(0.0001g)         31.       Triaxial shear         4.       Three gang consolidation test device         5.       Thermometer         6.       Sieves         7.       Shinkage limit |         |
|--|---------|
| 23. DO meter         24. Conical flask 10 mL         25. Conductivity meter         26. Compound microscope         27. COD digester (with 6 heating mantle)         28. China dish         29. Burette 50mL with stand         30. Burette 25mL with stand         31. BOD incubator         32. Beaker 500mL         33. Beaker 100mL         34. Beaker 100mL         35. Bacteriological incubator         36. Autoclave         37. Weighing machine(0.0001g)         38. Weighing machine(0.001g)         39. Weighing machine(0.001g)         30. Triaxial shear         4. Three gang consolidation test device         5. Thermometer         6. Sieves         7. Shinkage limit   |         |
| 24. Conical flask 10 mL         25. Conductivity meter         26. Compound microscope         27. COD digester (with 6 heating mantle)         28. China dish         29. Burette 50mL with stand         30. Burette 25mL with stand         31. BOD incubator         32. Beaker 500mL         33. Beaker 100mL         34. Beaker 100mL         35. Bacteriological incubator         36. Autoclave         37. Weighing machine(0.001g)         38. Weighing machine(0.001g)         39. Van Shear apparatus         20. UTM of minimum of 20KN capacity         31. Triaxial shear         4. Three gang consolidation test device         5. Thermometer         6. Sieves         7. Shinkage limit  |         |
| 25. Conductivity meter         26. Compound microscope         27. COD digester (with 6 heating mantle)         28. China dish         29. Burette 50mL with stand         30. Burette 25mL with stand         31. BOD incubator         32. Beaker 500mL         33. Beaker 100mL         34. Beaker100mL         35. Bacteriological incubator         36. Autoclave         37. Weighing machine(0.0001g)         38. Weighing machine(0.001g)         39. Weighing machine(0.001g)         30. Triaxial shear         4. Three gang consolidation test device         5. Thermometer         6. Sieves         7. Shinkage limit   |         |
| 26. Compound microscope         27. COD digester (with 6 heating mantle)         28. China dish         29. Burette 50mL with stand         30. Burette 25mL with stand         31. BOD incubator         32. Beaker 500mL         33. Beaker 100mL         34. Beaker1000mL         35. Bacteriological incubator         36. Autoclave         37. Weighing machine(0.0001g)         38. Weighing machine(0.001g)         39. Weighing machine(0.001g)         30. Triaxial shear         4. Three gang consolidation test device         5. Thermometer         6. Sieves         7. Shinkage limit   |         |
| 27. COD digester (with 6 heating mantle)         28. China dish         29. Burette 50mL with stand         30. Burette 25mL with stand         31. BOD incubator         32. Beaker 500mL         33. Beaker 100mL         34. Beaker1000mL         35. Bacteriological incubator         36. Autoclave         37. Weighing machine(0.001g)         38. Weighing machine(0.001g)         39. Weighing machine(0.001g)         30. Triaxial shear         4. Three gang consolidation test device         5. Thermometer         6. Sieves         7. Shinkage limit  |         |
| 27. COD digester (with 6 heating mantle)         28. China dish         29. Burette 50mL with stand         30. Burette 25mL with stand         31. BOD incubator         32. Beaker 500mL         33. Beaker 100mL         34. Beaker1000mL         35. Bacteriological incubator         36. Autoclave         37. Weighing machine(0.001g)         38. Weighing machine(0.001g)         39. Weighing machine(0.001g)         30. Triaxial shear         4. Three gang consolidation test device         5. Thermometer         6. Sieves         7. Shinkage limit  |         |
| 28. China dish         29. Burette 50mL with stand         30. Burette 25mL with stand         31. BOD incubator         32. Beaker 500mL         33. Beaker 100mL         34. Beaker100mL         35. Bacteriological incubator         36. Autoclave         37. Weighing machine(0.0001g)         38. Weighing machine(0.001g)         39. Weighing machine(0.001g)         30. Triaxial shear         4. Three gang consolidation test device         5. Thermometer         6. Sieves         7. Shinkage limit   |         |
| 29. Burette 50mL with stand<br>30. Burette 25mL with stand<br>31. BOD incubator<br>32. Beaker 500mL<br>33. Beaker 100mL<br>34. Beaker1000mL<br>35. Bacteriological incubator<br>36. Autoclave<br>37. Weighing machine(0.0001g)<br>38. Weighing machine(0.001g)<br>10. Van Shear apparatus<br>20. UTM of minimum of 20KN capacity<br>30. Triaxial shear<br>40. Three gang consolidation test device<br>50. Thermometer<br>60. Sieves<br>70. Shinkage limit  |         |
| 30.       Burette 25mL with stand         31.       BOD incubator         32.       Beaker 500mL         33.       Beaker 100mL         34.       Beaker1000mL         35.       Bacteriological incubator         36.       Autoclave         37.       Weighing machine(0.0001g)         38.       Weighing machine(0.001g)         39.       Vurth of minimum of 20KN capacity         30.       Triaxial shear         4.       Three gang consolidation test device         5.       Thermometer         6.       Sieves         7.       Shinkage limit  |         |
| 31. BOD incubator         32. Beaker 500mL         33. Beaker 100mL         34. Beaker1000mL         35. Bacteriological incubator         36. Autoclave         37. Weighing machine(0.0001g)         38. Weighing machine(0.001g)         39. Weighing machine(0.001g)         31. Triaxial shear         4. Three gang consolidation test device         5. Thermometer         6. Sieves         7. Shinkage limit   |         |
| 32. Beaker 500mL         33. Beaker 100mL         34. Beaker1000mL         35. Bacteriological incubator         36. Autoclave         37. Weighing machine(0.0001g)         38. Weighing machine(0.001g)         38. Weighing machine(0.001g)         39. UTM of minimum of 20KN capacity         30. Triaxial shear         4. Three gang consolidation test device         5. Thermometer         6. Sieves         7. Shinkage limit   |         |
| 33. Beaker 100mL         34. Beaker1000mL         35. Bacteriological incubator         36. Autoclave         37. Weighing machine(0.0001g)         38. Weighing machine(0.001g)         1. Van Shear apparatus         2. UTM of minimum of 20KN capacity         3. Triaxial shear         4. Three gang consolidation test device         5. Thermometer         6. Sieves         7. Shinkage limit  |         |
| 34. Beaker1000mL         35. Bacteriological incubator         36. Autoclave         37. Weighing machine(0.0001g)         38. Weighing machine(0.001g)         38. Weighing machine(0.001g)         1. Van Shear apparatus         2. UTM of minimum of 20KN capacity         3. Triaxial shear         4. Three gang consolidation test device         5. Thermometer         6. Sieves         7. Shinkage limit  |         |
| 35. Bacteriological incubator         36. Autoclave         37. Weighing machine(0.0001g)         38. Weighing machine(0.001g)         1. Van Shear apparatus         2. UTM of minimum of 20KN capacity         3. Triaxial shear         4. Three gang consolidation test device         5. Thermometer         6. Sieves         7. Shinkage limit  |         |
| 36. Autoclave         37. Weighing machine(0.0001g)         38. Weighing machine(0.001g)         1. Van Shear apparatus         2. UTM of minimum of 20KN capacity         3. Triaxial shear         4. Three gang consolidation test device         5. Thermometer         6. Sieves         7. Shinkage limit  |         |
| 37. Weighing machine(0.0001g)         38. Weighing machine(0.001g)         1. Van Shear apparatus         2. UTM of minimum of 20KN capacity         3. Triaxial shear         4. Three gang consolidation test device         5. Thermometer         6. Sieves         7. Shinkage limit  |         |
| 38. Weighing machine(0.001g)         1. Van Shear apparatus         2. UTM of minimum of 20KN capacity         3. Triaxial shear         4. Three gang consolidation test device         5. Thermometer         6. Sieves         7. Shinkage limit  |         |
| 38. Weighing machine(0.001g)         1. Van Shear apparatus         2. UTM of minimum of 20KN capacity         3. Triaxial shear         4. Three gang consolidation test device         5. Thermometer         6. Sieves         7. Shinkage limit  |         |
| 1.       Van Shear apparatus         2.       UTM of minimum of 20KN capacity         3.       Triaxial shear         4.       Three gang consolidation test device         5.       Thermometer         6.       Sieves         7.       Shinkage limit   |         |
| <ol> <li>UTM of minimum of 20KN capacity</li> <li>Triaxial shear</li> <li>Three gang consolidation test device</li> <li>Thermometer</li> <li>Sieves</li> <li>Shinkage limit</li> </ol>   |         |
| <ul> <li>3. Triaxial shear</li> <li>4. Three gang consolidation test device</li> <li>5. Thermometer</li> <li>6. Sieves</li> <li>7. Shinkage limit</li> </ul>   |         |
| <ul> <li>4. Three gang consolidation test device</li> <li>5. Thermometer</li> <li>6. Sieves</li> <li>7. Shinkage limit</li> </ul>  |         |
| 5. Thermometer<br>6. Sieves<br>7. Shinkage limit   |         |
| <ul><li>6. Sieves</li><li>7. Shinkage limit</li></ul>  |         |
| 7. Shinkage limit  |         |
|  |         |
|  |         |
| 7. Soil Mechanics Laboratory 8. Sand replacement method accessories and core cutter met  | nod     |
| son mechanics Laboratory accessories   |         |
| 9. Relative Density apparatus  |         |
| 10. Proctor compaction apparatus   |         |
| 11. Liquid and plastic limit apparatus   |         |
| 12. Hydrometer   |         |
|  |         |
| 13. Direct shear apparatus   |         |
| 14. Weighing machine 20kg capacity   |         |
| 15. Weighing machine 1kg capacity  |         |
| 1. Vee Bee Consistometer   |         |
| 2. Trovels and planers   |         |
| 3. Slump cone  |         |
| 4. Sieves  |         |
| 5. Marshall Stability Apparatus  |         |
| 6. Los - Angeles abrasion testing machine  |         |
| 7. Flow table  |         |
| 8 Concerts Driver moulds   |         |
| 8. Concrete Pristil mounds<br>9. Concrete Mixer  |         |
|  |         |
| 10. Concrete cylinder moulds   |         |
| 11. Concrete cube moulds   |         |
| 12. Apparatus  |         |
| 13. Blains Apparatus   |         |
| 14. Aggregate impact testing machine   |         |
| 15. Vibrator   |         |
| 16. UTM - 400 kN capacity  |         |
| 1. Vertical Milling Machine  |         |
| 2. Arc welding transformer with cables and holders   |         |
| 3. Centre Lathes   |         |
|  |         |
| 9. Manufacturing Technology Laboratory I 5. Moulding table, Moulding equipments  |         |
|  |         |
| 6. Oxygen and acetylene gas cylinders, blow pipe and other   | weiding |
| outfit   |         |
| 7. Shaper  |         |
| 8. Sheet metal forming tools and equipments  |         |
| 1. DC Series motor   |         |
| 2. Three phase synchronous motor   |         |
| 3. Three phase Squirrel cage Induction motor   |         |
| 4 Thurse where Slive size Industion method   |         |
| 10.Electrical Engineering Laboratory4.Infee phase Ship Fing Induction motor5.Three phase alternator  |         |
|  |         |
| 6. Single phase transformer  |         |
| 7. DC shunt motor-DC Shunt Generator set   |         |
| 8. DC Shunt motor-DC Series Generator set  |         |
| 9. DC Shunt motor  |         |

| 11.       Manufacturing Technology Laboratory II       2. Centre less grinding machine         11.       Manufacturing Technology Laboratory II       3. CNC Laths         12.       Gar Hobbing Machine 1         13.       Karange Machine 1         14.       Torizontal Milling Machine 1         15.       Gar Hobbing Machine 1         16.       Construction Machine 1         17.       Radia Driving Machine 1         18.       Tori and cutter grinder         19.       Company State Grinding Machine 1         10.       Strength of Materials and Fluid         10.       Company State Crinding Machine 1         11.       Company State Crinding Machine 1         12.       Strength of Materials and Fluid         13.       Strength of Materials and Fluid         14.       Mechanics and Machinery         13.       Kinematics and Machinery         14.       Network Marker Straing Machine for tensile and compressive loads (2500)         15.       Network Marker Straing Machine (801 C)         16.       Mether Grinding CRINC         17.       Torsion Vibration setup         18.       Kinematics and Dynamics         19.       Spring Tessing Machine (801 C)         19.       Numeri   |     |  |     |                              |
|---|-----|--|-----|------------------------------|
| 11.       Manufacturing Technology Laboratory II       3. CNC Labé         11.       Manufacturing Technology Laboratory II       4. CNC milling machine         12.       Ger Shaper machine       5. Cylindrixal Grinding Machine         13.       Kinematics and Phuid       7. Ger Shaper machine         14.       Transfer Grinding Machine       7. Ger Shaper machine         15.       Verical Milling Machine       7. Ger Shaper machine         16.       Laber Tool Dynamoneter       7. Ger Shaper machine         17.       Ger Shaper machine       7. Tool and cutter grinder         18.       Nortical Machine       7. Ger Shaper machine         19.       Surface Grinding Machine       7. Ger Shaper machine         19.       Surface Grinding Machine       7. Tool and cutter grinder         19.       Certifyagi pump submership Machine       7. Forcial Milling Machine         10.       Ger Shaper Machine String Machine String Machine String Machine String Machine       7. Gering Contegring Machine         10.       Strength of Materials and Fluid       7. Gering Contegring Machine       7. Gering Contegring Machine         12.       Strength of Materials and Fluid       7. Gering Contegring Machine       7. Gering Contegring Machine         12.       Laboratory       1. Torsion Tesing Machine (00 N Capacity   |     |  |     | Turret and Capstan Lathes    |
| 11.       Manufacturing Technology Laboratory II <ul> <li>Core Shaper machine</li> <li>Gard Shaper machine</li> <li>Gard Shaper machine</li> <li>Gard Shaper machine</li> <li>Borizonial Milling Machine I</li> <li>Gard Shaper machine</li> <li>Borizonial Milling Machine</li> <li>Inthe Tool Dynamometer</li> <li>Mala Drifing Machine</li> <li>Badial Drifing Machine</li> <li>Strength of Materials and Fluid</li> <li>Strength Techno Medes Strength Machine</li> <li>Strength of Materials and Fluid</li> <li>Strength of Materials and Fluid</li> <li>Strength Techno Medes Strength Machine</li> <li>Strength of Materials and Fluid</li> <li>Strength of Materials and Fluid<td></td><td></td><td></td><td></td></li></ul> |     |  |     |                              |
| 11.       Manufacturing Technology Laboratory II       5. Cylindrad Grinding Machine         9.       Gar Mobing Machine         9.       Lafte Tool Dynamometer         10.       Miling Tool Dynamometer         11.       Radia Dolling Machine         12.       Strength of Materials and Fluid         12.       Strength of Materials and Fluid         13.       Strength of Materials and Fluid         14.       Reciprocating pump-stope results         15.       Strength of Materials and Fluid         16.       Gara pump stop         17.       Reciprocating pump-stope results         18.       Reciprocating pump-stope results         19.       Strength of Materials and Fluid         10.       Gara pump stop         11.       Construction Straing Machine for tensile and compressive loads (2500 N)         11.       Tosion Testing Machine for tensile and compressive loads (2500 N)         12.       Universal for Straing machine with double 1 shear         13.       Kinematics and Dynamics       Strength Straing machine with double 1 shear         14.       Kinematics and Dynamics       Tran table apprantas         13.       Kinematics and Dynamics       Transverse Whatton setup         14.       Thermal Engineering Laborato   |     |  | 3.  |                              |
| 11.       Manufacturing Technology Laboratory II       6. Gear Hobbing Machine 1         11.       Gear Shaper machine       8. Horizontal Milling Machine         12.       Inthe Teal Dynamometer       11.         13.       Strength of Materials and Fluid       7.         14.       Tool Materials       6.         15.       Strength of Materials and Fluid       7.         16.       Gear purp setup       1.         17.       Strength of Materials and Fluid       7.         18.       Reciprocaling machine       1.         19.       Strength of Materials and Fluid       7.         10.       Strength of Materials and Fluid       7.         10.       Strength of Materials and Fluid       7.         11.       Reciprocaling machine       1.         12.       Strength of Materials and Fluid       7.         13.       Kinematics and Machinery       1.         14.       Horizontal Milling Machine ion compressive loads (2500         15.       Withing of Stating Machine ion Compressive loads (2500         16.       Stating Stating Machine ion Compressive loads (2500         17.       Laboratory       1.         18.       Kinematics and Dynamics       1.  |     |  | 4.  | CNC milling machine          |
| 11.       Manufacturing Technology Laboratory II       7. Ges Shaper machine         11.       Manufacturing Technology Laboratory II       8. Horizound Multing Machine         12.       Manufacturing Technology Laboratory II       8. Horizound Multing Machine         13.       Strength of Materials and Fluid       1. Tool Materia Multing Machine         12.       Strength of Materials and Fluid       1. Company and the strength of Materials and Fluid         12.       Strength of Materials and Fluid       8. Rockwell Handress Testing Machine         13.       Strength of Materials and Fluid       9. Rockwell Handress Testing Machine         14.       Nethanics and Machinery       1. Rockwell Handress Testing Machine         15.       Strength of Materials and Fluid       9. Rockwell Handress Testing Machine         16.       Spring Testing Machine for tensile and compressive loads (2500 N)       11. Toroion Testing Machine for tensile and compressive loads (2500 N)         16.       Spring Testing Machine for tensile and compressive loads (2500 N)       11. Toroion Testing Machine (60 NM Capacity)         11.       Laboratory       1. Kinematic Models to study various mechanisms         13.       Kinematics and Dynamics       1. Kinematic Models to study various mechanisms         14.       Thermal Engineering Laboratory       1. Strengt Provide stesting thoredia strengt Providia strengt Provide Stren   |     |  | 5.  | Cylindrical Grinding Machine |
| 11.       Manufacturing Technology Laboratory II       8. Horizontal Milling Machine         12.       Inda Tool Dynamometer       10. Milling Machine         13.       Kinematics and Fluid       11. Gasar pump setup         14.       Tool and cuture graider         13.       Kinematics and Dynamics       11. Grap pump setup         14.       Tool and cuture graider         14.       Tool and cuture graider         15.       Kinematics and Machinery         16.       Respired program pump setup         17.       Respired program pump setup         18.       Noniter Setup         19.       Laboratory         10.       Strength of Materials and Fluid         10.       Reciprecing pump setup         11.       Reciprecing pump setup         12.       Strength of Materials and Fluid         13.       Kinematic Machinery         13.       Kinematic Models to study various mechanisms         14.       Thermal Engineering Laboratory         14.       Thermal Engi   |     |  | 6.  | Gear Hobbling Machine 1      |
| 11.       Manufacturing Technology Laboratory II       8. Horizontal Milling Machine         12.       Inda Tool Dynamometer       10. Milling Machine         13.       Kinematics and Fluid       11. Gasar pump setup         14.       Tool and cuture graider         13.       Kinematics and Dynamics       11. Grap pump setup         14.       Tool and cuture graider         14.       Tool and cuture graider         15.       Kinematics and Machinery         16.       Respired program pump setup         17.       Respired program pump setup         18.       Noniter Setup         19.       Laboratory         10.       Strength of Materials and Fluid         10.       Reciprecing pump setup         11.       Reciprecing pump setup         12.       Strength of Materials and Fluid         13.       Kinematic Machinery         13.       Kinematic Models to study various mechanisms         14.       Thermal Engineering Laboratory         14.       Thermal Engi   | 11  |  | 7.  | Gear Shaper machine          |
| 14.         9. lather Tool Dynamometer           11. Radial Drilling Machine         11.           12.         Surface Grinding Machine           13. Tool and cutter grinder         14.           14.         Gear pump setup           21.         Gear pump setup           21.         Gear pump setup           22.         Strength of Materials and Fluid           31.         Centrifugi pump setup           31.         Reciprocaling pump setup           32.         Reciprocaling pump setup           33.         Reciprocaling pump setup           34.         Reciprocaling pump setup           34.         Reciprocaling pump setup           35.         Reciprocaling pump setup           36.         Reciprocaling pump setup           37.         Reciprocaling pump setup           38.         Reciprocaling machine of NM Capacity)           31.         Laboratory           37.         Network Setup           38.         Reciprocaling Machine (20 J Capacity)           39.         Itematic Machine (20 J Capacity)           31.         Kinematics and Dynamics           38.         Transverse vibration setup           39.         Whiriting of shift apparatus     <   | 11. | Manufacturing Technology Laboratory II | 8.  |                              |
| 10. Milling Tool Dynamoueter       11. Mailing Tooling Machine       12. Surface Grinding Machine       13. Tool and cutter grinder       14. Tool Makers Meroscope       15. Vertical Milling Machine       16. Gen pump setup       17. Gen pump setup       18. Strength of Materials and Fluid       19. Strength of Materials and Fluid       10. Melling Machine       11. Gen pump setup       11. Gen pump setup       12. Strength of Materials and Fluid       14. Mechanics and Machinery       15. Laboratory       15. Kinematics and Dynamics       16. Kinematics and Dynamics       17. Kaplan Universe setup       18. Kinematics and Dynamics       19. Kinematics and Dynamics       19. Kinematics and Dynamics       10. Kinematic Models to study various mechanisms       11. Kinematic Models to study various mechanisms       12. Kinematics and Dynamics       13. Kinematics and Dynamics       14. Thermal Engineering Laboratory   |     |  | 9.  |                              |
| 11. Radial Drilling Machine         12. Surface Orioning Machine         13. Tool and cutter grinder         14. Tool Makers Microscope         15. Vertical Milling Machine         16. Gear pump setup         17. Practic turbine setup         18. Francis turbine setup         19. Centrifugal pump/submergible pump setup         10. Gear pump setup         11. Radial Drilling Machine         11. Reciprocessing pump setup         11. Reciprocessing Machine of tensile and compressive loads (2500 N)         11. Reciprocessing Machine (6) NM Capacity)         11. Turbersal Testing Machine (6) NM Capacity)         11. Turbersal Testing Machine (6) NM Capacity)         11. Turbersal Testing Machine (300 C) Capacity)         11. Turbersal Testing Machine (300 C) Capacity)         11. Turbersal Testing Machine (300 C) Capacity)         11. Turbersal States         12. Kinematics and Dynamics         13. Kinematics and Dynamics         14. Astroke Daed Engine with mechanical loading         15. Venture and the apparatus         16. States approximation setup   |     |  | 10. |                              |
| 13. Tool and cutter grinder         14. Tool Makers Microscope         15. Vertical Milling Machine         16. Gare pamp setup         2. Fracis turbine setup         2. Fracis turbine setup         3. Torol Makers Microscope         17. Vertical Milling Machine         18. Vertical Machine         19. Strength of Materials and Fluid         Mechanics and Machinery         12. Laboratory         11. Torisin Testing Machine (for Unovide)         12. Universal Testing Machine (for Unovide)         13. Kinematics and Dynamics         13. Kinematics and Dynamics         14. Kinematics and Dynamics         15. Vertical Machine (for Unovide)         14. Thermal Engineering Laboratory         14. Thermal Engineering Laboratory         14. Thermal Engineering Laboratory   |     |  | 11. | Radial Drilling Machine      |
| 14. Tool Makers Microscope       15. Vertical Willing Machine       16. Gear pump setup       17. Control Materials and Fluid       18. Strength of Materials and Fluid       19. Mechanics and Machinery       10. Spring Testing Machine for tensile and compressive loads (2500 N)       19. Laboratory       10. Spring Testing Machine for tensile and compressive loads (2500 N)       10. Spring Testing Machine for tensile and compressive loads (2500 N)       11. Torsion Testing Machine for tensile and compressive loads (2500 N)       12. Laboratory       13. Kinematics and Dynamics       14. Kinematics and Dynamics       15. Multile formatics and Dynamics       16. Torsion Setup       17. Kaplan urbine setup       18. Inpact Testing Machine (200 C)       19. Kinematics and Dynamics       19. Control of shaft apparatus       19. Kinematics and Dynamics       10. Torsion setup       11. Torsion setup       12. Inpact Testing Machine (200 C) Capacity)       13. Kinematics and Dynamics       14. Tors rest Setup       15. Multile Verting Machine (200 C) Capacity)       16. Metallargical Microscopes       17. Kaplan urbine setup       18. Inpact Testing Machine (200 C) Capacity)       19. Kinematics and Dynamics       10. Transverse vibration setup       11. Torsion setup       12. Aparatus con   |     |  | 12. | Surface Grinding Machine     |
| 14. Tool Makers Microscope       15. Vertical Willing Machine       16. Gear pump setup       17. Control Materials and Fluid       18. Strength of Materials and Fluid       19. Mechanics and Machinery       10. Spring Testing Machine for tensile and compressive loads (2500 N)       19. Laboratory       10. Spring Testing Machine for tensile and compressive loads (2500 N)       10. Spring Testing Machine for tensile and compressive loads (2500 N)       11. Torsion Testing Machine for tensile and compressive loads (2500 N)       12. Laboratory       13. Kinematics and Dynamics       14. Kinematics and Dynamics       15. Multile formatics and Dynamics       16. Torsion Setup       17. Kaplan urbine setup       18. Inpact Testing Machine (200 C)       19. Kinematics and Dynamics       19. Control of shaft apparatus       19. Kinematics and Dynamics       10. Torsion setup       11. Torsion setup       12. Inpact Testing Machine (200 C) Capacity)       13. Kinematics and Dynamics       14. Tors rest Setup       15. Multile Verting Machine (200 C) Capacity)       16. Metallargical Microscopes       17. Kaplan urbine setup       18. Inpact Testing Machine (200 C) Capacity)       19. Kinematics and Dynamics       10. Transverse vibration setup       11. Torsion setup       12. Aparatus con   |     |  | 13. | Tool and cutter grinder      |
| 14.     15. Vertical Milling Machine       13.     Kinematics and Dynamics       14.     Thermal Engineering Laboratory       14.     Thermal Engineering Laboratory  |     |  |     |                              |
| 14.       Gear pump setup         11.       Gear pump setup         12.       Fractis turbine setup         13.       Strength of Materials and Fluid         14.       Mechanics and Machinery         13.       Kinematics and Dynamics         13.       Kinematics and Dynamics         14.       Thermal Engineering Laboratory         15.       Figure 2 (Source)         16.       Gear pump setup         17.       Kinematics and Dynamics         18.       Methods to study various mechanisms         19.       Kinematics and Dynamics         11.       Torsion Testing Machine (60 NM Capacity)         12.       Universal Tentile Testing machine with double 1 shear attractions with aduptical Microscopes         19.       Wenturi meter setup         19.       Kinematics and Dynamics         10.       Kinematic Models to study various mechanisms         11.       Kinematics and Dynamics         12.       Torsion apparatus         13.       Kinematics and Dynamics         14.       Thermatics and Dynamics         15.       Torsion setup of cantilever         16.       Gear Models         17.       Torsion setup of cantilever         18  |     |  |     |                              |
| 12.       Francis turbine setup         12.       Francis turbine setup         12.       Strength of Materials and Fluid         12.       Mechanics and Machinery         12.       Mechanics and Machinery         13.       Kinematics and Machinery         13.       Kinematics and Dynamics         13.       Kinematics and Dynamics         14.       Thermal Engineering Laboratory         14.       Thermal Engineering Laboratory  |     |  |     |                              |
| 12.       Strength of Materials and Fluid       3.       Cearificaga pump/submergible pump setup         12.       Strength of Materials and Fluid       6.       Pipe Flow analysis setup         7.       Reciprocating pump setup       8.       Rockwell Hardness Testing Machine         9.       Rockwell Hardness Testing Machine (0 NM Capacity)       1.         1.       Laboratory       11.       Torsion Testing Machine (60 NM Capacity)         1.       Luioversal Testing Machine (60 NM Capacity)       1.         1.       Venturi meter setup       1.       Normeter         1.       Venturi meter setup       1.       Normeter         1.       Venturi meter setup       1.       Normeter Setup         1.       Kinematic Models to study various mechanisms       2.         1.       Kinematics and Dynamics       1.       Torsion astep of contilever         1.       Torsion astep of contilever       1.       Norme system setup         1.       Kinematics and Dynamics       1.       Norma system setup         1.       Laboratory       1.       Kinematic Models to study various mechanisms         2.       Wirting of shaft apparatus       7.       Norma system setup         1.       Spring mass virbatiton system       Set   |     |  |     |                              |
| 12.       Brinell Hardness Testing Machine         12.       Strength of Materials and Fluid         12.       Mechanics and Machinery         12.       Laboratory         13.       Kinematics and Machinery         14.       Torsion Testing Machine for tensile and compressive loads (2500 N)         13.       Kinematics and Dynamics         13.       Kinematics and Dynamics         14.       Thermatics and Dynamics         15.       Kinematics and Dynamics         16.       Felin With Web Setup         17.       Kinematics and Dynamics         18.       Faster Setup         19.       Kinematics and Dynamics         19.       Franzerse vibration setup for antibility of shaft apparatus         19.       Franzerse vibration setup for antibility of antibility of shaft apparatus         19.       Franzerse vibration setup for antibility of antibility o  |     |  |     |                              |
| 12.       Strength of Materials and Fluid<br>Mechanics and Machinery<br>Laboratory       5.       Pelton wheel setup<br>7.       Reciprocenting pump setup<br>8.       Rockwell Hardness Testing Machine<br>9.         12.       Laboratory       10.       Spring Testing Machine for tensile and compressive loads (2500<br>N)         13.       Kinematics and Dynamics<br>Laboratory       11.       Torsion Testing Machine (60 NM Capacity)         13.       Kinematics and Dynamics<br>Laboratory       11.       Torsion Testing Machine (300 C)         14.       Kinematics and Dynamics       2.       Whiring of shaft apparatus         13.       Kinematics and Dynamics       2.       Whiring of shaft apparatus         14.       ThermalE Engineering Laboratory       1.       4.         14.       Thermal Engineering Laboratory       1.       1.         14.       Thermal Engineering Laboratory       1.       4.         14.       Thermal Engineering Laboratory       1.       1.         14.       Thermal Engineering Laboratory       1.       1.         15.       Testing A  |     |  | 4.  |                              |
| 12.       Strength of Materials and Fluid       6.       Pipe Flow analysis setup         12.       Mechanics and Machinery       8.       Rockwell Hardness Testing Machine         13.       Laboratory       10.       Spring Testing Machine (60 NM Capacity)         12.       Universal Testing Machine (60 NM Capacity)         13.       Kinematics and Dynamics       11.         14.       Kinematics and Dynamics       11.         13.       Kinematics and Dynamics       11.         14.       Thermal Engineering Laboratory       11.         14.       Thermal Engineering Laboratory       11.         14.       Thermal Engineering Laboratory       12.         14.       Thermal Engineering Laboratory       13.         14.       Thermal Engineering Laboratory       14.   |     |  | 5.  |                              |
| 12.       Strength of Materials and Fluid<br>Mechanics and Machinery       7.       Reciprocating pump setup<br>8.       Rockwell Hardness Tessing Machine<br>9.         12.       Laboratory       10.       Spring Tessing Machine for tensile and compressive loads (2500<br>N)         13.       Laboratory       11.       Torsion Testing Machine (60 NM Capacity)         13.       Kinematics and Dynamics       11.       Torsion Testing Machine (800 C)         14.       Orifice meter setup       14.       Orifice meter setup         13.       Kinematics and Dynamics       2.       Whirling of shaft apparatus         14.       Kinematics and Dynamics       3.       Two rotor vibration setup         15.       Muffer Furnace (800 C)       16.       Metallargical Microscopes         16.       Kinematic Models to study various mechanisms       2.         17.       Reciprocenting to study various mechanisms       3.         18.       Impact Testing Machine (300 C) tapacity)       1.         19.       Kinematic Models to study various mechanisms       2.         19.       Whiring of shaft apparatus       3.       Two rotor vibration setup of cantilever         6.       Torsional Vibration of single rotor system setup       7.         7.       Parallelelecontent Roto setup       11. <td></td> <td></td> <td></td> <td></td>   |     |  |     |                              |
| 12.       Strength of Materials and Fluid<br>Mechanics and Machinery<br>Laboratory       8.       Rockwell Hardness Testing Machine<br>9.       Rorameter         10.       Spring Testing Machine for tensile and compressive loads (2500<br>N)       11.       Torsion Testing Machine (60 NM Capacity)         12.       Universal Tensile Testing machine with double 1 shear<br>attachment 40 Ton Capacity       12.       Universal Tensile Testing machine with double 1 shear<br>attachment 40 Ton Capacity)         13.       Kinematics and Dynamics<br>Laboratory       1.       Kinematic Models to study various mechanisms         13.       Kinematics and Dynamics<br>Laboratory       1.       Kinematic Models to study various mechanisms         14.       Thermal Engineering Laboratory       1.       Kinematic Models to study various mechanical loading         14.       Thermal Engineering Laboratory       1.       Kinematic Models to study various mechanical loading         14.       Thermal Engineering Laboratory       1.       Kinematic Models to study various mechanical loading         14.       Thermal Engineering Laboratory       1.       1.       Kinematic Models to study various mechanical loading         14.       Thermal Engineering Laboratory       1.       1.       1.       1.         14.       Thermal Engineering Laboratory       1.       1.       1.       1.         14.   |     |  | 7.  |                              |
| 12.       Strength of Materials and Fluid<br>Mechanics and Machinery       9.       Rotameter         12.       Ideoration       9.       Rotameter         13.       Laboratory       11.       Torsion Testing Machine for tensile and compressive loads (2500<br>N)         13.       Kinematics and Dynamics       1.       Forsion Testing Machine for tensile and compressive loads (2500<br>N)         13.       Kinematics and Dynamics       1.       Kinematics (800 C)         14.       Thermat Engineering Laboratory       1.       Kinematic Models to study various mechanical output of cantilever         14.       Thermal Engineering Laboratory       1.       Kinematics and Dynamics       1.         14.       Thermal Engineering Laboratory       1.       Single twin stage rappartus       1.         14.       Thermal Engineering Laboratory       1.       Single twin stage rappartus       1.         14.       Thermal Engineering Laboratory       1.       Single twin stage rappartus       1.         14.       Thermal Engineering Laboratory       1.       Single twin stage rappartus       1.         14.       Thermal Engineering Laboratory       1.       Astroke Diseel Engine with mechanical loading       1.         14.       Thermal Engineering Laboratory       1.       Astroke Diseel Engine with  |     |  |     |                              |
| 12.       Mechanics and Machinery         1.       Description         1.       Laboratory         1.       Torsion Testing Machine for tensile and compressive loads (2500 N)         1.       Torsion Testing Machine (60 NM Capacity)         1.       Universal Tensile Testing machine with double 1 shear attachment 40 Ton Capacity         1.       Venturi meter setup         1.       Venturi meter setup         1.       Kinematics and Dynamics         1.       Kinematics and Dynamics         1.       Kinematics and Dynamics         1.       Kinematics and Dynamics         1.       Norito engressive         1.       Norito a setup of canilever         6.       Torsional Vibration setup of canilever         7.       Spring mass vibration setup of canilever         8.       Motorised groscope         9.       Governor apparatus         10.       Gear Models         11.       Dynamics         12.       Astroke Diseel Engine with hydraulic loading         2.       4-stroke Diseel Engine with hydraulic loading         3.       4-stroke Diseel Engine with hydraulic loading         3.       4-stroke Diseel Engine with hydraulic loading         4.       Singl  |     | Strength of Materials and Fluid        |     | -                            |
| 14.       Thermal Engineering Laboratory       11.       Torsion Testing Machine (60 NM Capacity)         13.       Kinematics and Dynamics       11.       Torsion Testing Machine (80 C)         13.       Kinematics and Dynamics       11.       Kinematics and Dynamics         14.       Thermal Engineering Laboratory       11.       Torsion Testing Machine (30 ND Capacity)         14.       Thermal Engineering Laboratory       11.       Torsion Testing Machine (30 ND Capacity)         14.       Thermal Engineering Laboratory       11.       Torsional Vibran apparatus         14.       Thermal Engineering Laboratory       11.       11.       Torsional Vibran apparatus         14.       Thermal Engineering Laboratory       11.       11.       11.       11.         14.       Thermal Engineering Laboratory       11.       11.       11.       11.         14.       Thermal Engineering Laboratory <td>12</td> <td>-</td> <td></td> <td></td>  | 12  | -                                      |     |                              |
| 14.       Torsion Testing Machine (00 NM Capacity)         12.       Universal Tensile Testing machine (00 NM Capacity)         13.       Venturi meter setup         14.       Orifice meter setup         15.       Muffle Furnace (800 C)         16.       Metallurgical Microscopes         17.       Kaplan turbine setup         18.       Impact Testing Machine (300 J Capacity)         18.       Impact Testing Machine (300 J Capacity)         19.       Kinematic Models to study various mechanisms         2.       Whirling of shaft apparatus         3.       Tow rotor vibration setup         4.       Turn table apparatus         5.       Tow rotor vibration setup         6.       Torsional Vibration of single rotor system setup         7.       Spring mass vibration system         8.       Motorised gyroscope         9.       Governor apparatus - Watt, Porter, Proell and Hartnell governors         10.       Gear Models         11.       Dynamic balancing machine         12.       Cam follower setup         1.       4-stroke Diesel Engine with mechanical loading         2.       4-stroke Diesel Engine with mechanical loading         3.       4-stroke Diesel Engine with mechanical loading   | 12. | Mechanics and Machinery                | 10. |                              |
| 14.       12.       Universal Tensile Testing machine with double 1 shear attachment 40 Ton Capacity         13.       Venturi meter setup       14.         14.       Orifice meter setup       15.         15.       Muffle Furnace (800 C)       16.         16.       Metallurgical Microscopes       17.         17.       Kaplan turbine setup       18.         18.       Impact Testing Machine (300 J Capacity)       1.         19.       Kinematics and Dynamics       2.         19.       Winifing of shaft apparatus       3.         19.       Cortor vibration setup       1.         19.       Turn table apparatus       3.         19.       Coveron apparatus       4.         19.       Goveron apparatus       4.         10.       Goveron apparatus       4.         11.       4-stroke Diesel Engine with mechanical loading       2.         20.       4-stroke Diesel Engine with mechanical loading       3.         21.       4-stroke Diesel Engine with mechanical loading       3.         22.       4-stroke Diesel Engine with mechanical loading       3.         33.       4-stroke Diesel Engine with mechanical loading       3.         34.       4.       Stroke  |     | Laboratory                             | 11  | ·                            |
| 14.       Thermal Engineering Laboratory <ul> <li>Intermal Engineering Laboratory</li> <li>Intermal Engineering Laboratory</li> </ul> <ul> <li>Intermal Engineering Laboratory</li> <li>Intermal Engineering Laboratory</li> <li>Intermal Engineering Laboratory</li> </ul> <li>Intermal Engineering Laboratory</li> <li>Intermal Engineering Laboratory</li> <ul> <li>Intermal Engineering Laboratory</li> </ul> <li>Intermal Engineering Laboratory</li> <ul> <li>Intermal Engineering Laboratory</li> <li>Intermal Engineering Laboratory</li> <li>Intermal Engineering Laboratory</li> <li>Intermal Engineering Laboratory</li> </ul>   |     | Laboratory                             |     |                              |
| 13. Venturi meter setup         14. Orifice meter setup         15. Muffle Furnace (800 C)         16. Metallurgical Microscopes         17. Kaplan turbine setup         18. Impact Testing Machine (300 J Capacity)         19. Kinematics and Dynamics         20. Whiring of shaft apparatus         3. Two rolor vibration setup         4. Turn table apparatus         5. Transverse vibration setup of cantilever         6. Torsional Vibration of single rotor system setup         7. Spring mass vibration system         8. Motorised gyroscope         9. Governor apparatus - Watt, Porter, Proell and Hartnell governors         10. Gear Models         11. Dynamic balancing machine         12. Cam follower setup         14. Thermal Engineering Laboratory         14.         14.         Thermal Engineering Laboratory         14.         14.   |     |  | 12. |                              |
| 14.       Orifice meter setup         15.       Muffle Furnace (800 C)         16.       Metallurgical Microscopes         17.       Kaplan turbine setup         18.       Impact Testing Machine (300 J Capacity)         11.       Kinematic Models to study various mechanisms         2.       Whirling of shaft apparatus         3.       Two rotor vibration setup         4.       Turn table apparatus         3.       Two rotor vibration setup         4.       Turn table apparatus         3.       Travorotor vibration setup         4.       Turn table apparatus         3.       Travorotor vibration setup         6.       Torsional Vibration of single rotor system setup         7.       Spring mass vibration system         8.       Motorised gyroscope         9.       Governor apparatus - Watt, Porter, Proell and Hartnell governors         10.       Gear Models         11.       Dynamic balancing machine         12.       Cam follower setup         14.       Hermal Engineering Laboratory         14.       Thermal Engineering Laboratory         14.       Thermal Engineering Laboratory         14.       Internal conductivity of insulating powder apparatus  |     |  | 13  |                              |
| 14.       Thermal Engineering Laboratory       15.       Muffle Furnace (800 C)       16.       Metallurgical Microscopes         14.       Thermal Engineering Laboratory       15.       Muffle Furnace (800 C)       16.       Metallurgical Microscopes         14.       Thermal Engineering Laboratory       16.       Metallurgical Microscopes       17.         14.       Thermal Engineering Laboratory       1.       1.       Steam of the apparatus         14.       Thermal Engineering Laboratory       1.       4.       4.       Stead of paratus         14.       Thermal Engineering Laboratory       1.       4.       4.       4.       4.         14.       Thermal Engineering Laboratory       1.       4.       4.       4.       4.         14.       Thermal Engineering Laboratory       1.       4.       4.       4.       4.         14.       Thermal Engineering Laboratory       1.       4.       4.       4.       4.         14.       Thermal Engineering Laboratory       1.       4.       4.       4.       4.         14.       Thermal Engineering Laboratory       1.       4.       4.       4.       4.         14.       Thermal Engineering Laboratory       1.   |     |  |     |                              |
| 14.       Thermal Engineering Laboratory       16.       Metallurgical Microscopes         14.       Thermal Engineering Laboratory       16.       Metallurgical Microscopes         14.       Thermal Engineering Laboratory       16.       Metallurgical Microscopes         14.       Thermal Engineering Laboratory       17.       Kapian turbine setup         14.       Thermal Engineering Laboratory       18.       Metallurgical Microscopes         14.       Thermal Engineering Laboratory       10.       Stefan Paparatus         14.       Metallurgical Microscopes       11.       Stefan Policy Forciting at compressor         14.       Thermal Engineering Laboratory       11.       4.       Stefan Policy Forciting at compressor         14.       Thermal Engineering Laboratory       11.       11.       11.       11.         14.       Thermal Engineering Laboratory       11.       11.       11.       11.         14.       Thermal Engineering Laboratory       11.       11.       11.  |     |  |     |                              |
| 14.       Thermal Engineering Laboratory         14.       Thermal Engineering Laboratory         14.       Thermal Engineering Laboratory         14.       Thermal Engineering Laboratory         15.       It Thermal Engineering Laboratory   |     |  |     |                              |
| 14.       Impact Testing Machine (300 J Capacity)         13.       Kinematic Models to study various mechanisms         13.       Kinematics and Dynamics         14.       Kinematics and Dynamics         14.       Thermal Engineering Laboratory         14.       Thermal Engineering Laboratory         14.       Thermal Engineering Laboratory         15.       Engine value         14.       Engineering Laboratory   |     |  |     |                              |
| 13.       Kinematics and Dynamics       1.       Kinematics and Dynamics         13.       Kinematics and Dynamics       3.       Two rotor vibration setup         14.       Taboratory       7.       Spring mass vibration system         8.       Morised gyroscope       9.       Governor apparatus         9.       Governor apparatus - Watt, Porter, Proell and Hartnell governors         10.       Gear Models       1.         11.       Paranic balancing machine       1.         12.       Cam follower setup       7.         13.       Formatic balancing machine       1.         14.       Thermal Engineering Laboratory       1.         14.<  |     |  |     |                              |
| 13.       Kinematics and Dynamics       2.       Whirling of shaft apparatus         13.       Kinematics and Dynamics       3.       Two rotor vibration setup         Laboratory       5.       Transverse vibration system         8.       Motorised gyroscope       9.         9.       Governor apparatus - Watt, Porter, Proell and Hartnell governors         10.       Gear Models         11.       Dynamic balancing machine         12.       Cam follower setup         14.       Thermal Engineering Laboratory         14.       Thermal Engineering Laboratory  |     |  |     |                              |
| 13.       Kinematics and Dynamics       3.       Two rotor vibration setup         13.       Kinematics and Dynamics       Tarnsverse vibration setup of cantilever         6.       Torsional Vibration of single rotor system setup         7.       Spring mass vibration system         8.       Motorised gyroscope         9.       Governor apparatus - Watt, Porter, Proell and Hartnell governors         10.       Gear Models         11.       Dynamic balancing machine         12.       Cam follower setup         14.       Thermal Engineering Laboratory         14.       Thermal Engineering Laboratory         14.       Thermal Engineering Laboratory  |     |  |     |                              |
| 13.       Kinematics and Dynamics       4.       Turn table apparatus         13.       Kinematics and Dynamics       5.       Transverse vibration of single rotor system setup         13.       Laboratory       Spring mass vibration of single rotor system setup         14.       Governor apparatus - Watt, Porter, Proell and Hartnell governors         16.       Gear Models         11.       Dynamic balancing machine         12.       Cam follower setup         13.       A-stroke Diesel Engine with mechanical loading         14.       Parallel/counter flow heat exchanger apparatus         14.       Thermal Engineering Laboratory         14.       Thermal Engineering Laboratory  |     |  |     |                              |
| 13.       Kinematics and Dynamics<br>Laboratory       5.       Transverse vibration setup of cantilever         6.       Torsional Vibration of single rotor system setup         7.       Spring mass vibration system         8.       Motorised gyroscope         9.       Governor apparatus - Watt, Porter, Proell and Hartnell governors         10.       Gear Models         11.       Dynamic balancing machine         12.       Cam follower setup         1.       4-stroke Diesel Engine with mechanical loading         2.       4-stroke Diesel Engine with electrical loading         3.       4-stroke Diesel Engine with electrical loading         4.       Parallel/counter flow heat exchanger apparatus         5.       Single/two stage reciprocating air compressor         9.       Steam Boiler with turbine setup         10.       Steam Boiler with conductivity of insulating powder apparatus 1         11.       Thermal Engineering Laboratory       11.         14.       Thermal Engineering Laboratory       12.         14.       Thermal Engineering Laboratory       13.         14.       Thermal Engineering Laboratory       14.         14.       Thermal Engineering Laboratory       15.         15.       IC Engine 2       16.  |     |  |     |                              |
| <ul> <li>13. Kinematics and Dynamics Laboratory</li> <li>6. Torsional Vibration of single rotor system setup 7. Spring mass vibration system 8. Motorised gyroscope 9. Governor apparatus - Watt, Porter, Proell and Hartnell governors 10. Gear Models 11. Dynamic balancing machine 12. Cam follower setup 1. 4-stroke Diesel Engine with mechanical loading 2. 4-stroke Diesel Engine with hydraulic loading 4. Parallel/counter flow heat exchanger apparatus 5. Pin-fin apparatus 6. Refrigeration test rig 7. Single cylinder Petrol Engine 8. Single/two stage reciprocating air compressor 9. Steam Boiler with turbine setup 10. Stefan-Boltzmann apparatus 11. Thermal Engineering Laboratory 14. Thermal Engineering Laboratory 14. Thermal Engineering Laboratory 14. Article Composite and 4 stroke model 16. Guarded plate apparatus 17. Forced convection inside tube apparatus 18. Emissivity measurement apparatus 19. Data Acquisition system with any one of the above engines 20. Composite wail apparatus 21. Apparatus for Flash and Fire </li> </ul>   |     |  |     |                              |
| 14.       Laboratory       7. Spring mass vibration system         14.       Thermal Engineering Laboratory       1.         15.       I.       I.         16.       I.       I.         17.       Forced Convection inside tube apparatus         18.       I.   | 12  | Kinematics and Dynamics                |     |                              |
| 14.       8. Motorised gyroscope         9. Governor apparatus - Watt, Porter, Proell and Hartnell governors         10. Gear Models         11. Dynamic balancing machine         12. Cam follower setup         1. 4-stroke Diesel Engine with mechanical loading         2. 4-stroke Diesel Engine with electrical loading         3. 4-stroke Diesel Engine with electrical loading         4. Parallel/counter flow heat exchanger apparatus         5. Pin-fin apparatus         6. Refrigeration test rig         7. Single cylinder Petrol Engine         8. Single/wo stage reciprocating air compressor         9. Steam Boiler with turbine setup         10. Stefan-Boltzmann apparatus         11. Thermal Engineering Laboratory         12. Natural convection-vertical cylinder apparatus         13. Multi-cylinder Petrol Engine         14. Engged pipe apparatus         15. I.C Engine 2 stroke and 4 stroke model         16. Guarded pipe apparatus         17. Forced convection inside tube apparatus         18. Emissivity measurement apparatus         19. Data Acquisition system with any one of the above engines         20. Composite wall apparatus         21. Apparatus for Flash and Fire   | 15. |  |     |                              |
| 14.       9. Governor apparatus - Watt, Porter, Proell and Hartnell governors         14.       Thermal Engineering Laboratory       9. Governor apparatus - Watt, Porter, Proell and Hartnell governors         14.       Thermal Engineering Laboratory       1.       4-stroke Diesel Engine with hydraulic loading         14.       Thermal Engineering Laboratory       1.       4-stroke Diesel Engine         14.       Thermal Engineering Laboratory       1.       1.         14.       Thermal Engineering Laboratory       1.       1.         14.       Apparatus conductivity of insulating powder apparatus 1       1.         15.       IC Engine 2 stroke and 4 stroke model       1.         16.       Guarded plate apparatus       1.         17.       Forced convection inside tube apparatus         18.       Emissivity measurement apparatus         19.       Data Acquisition system with any one of the above engines         20.       Composite wall apparatus       2.         21.       Apparatus for Flash and Fire   |     | Laboratory                             |     |                              |
| 14.       10. Gear Models         11. Dynamic balancing machine       11. Dynamic balancing machine         12. Cam follower setup       1. 4-stroke Diesel Engine with mechanical loading         14.       +stroke Diesel Engine with electrical loading         14.       Thermal Engineering Laboratory       10. Gear Models         14.       Thermal Engineering Laboratory       11. Dynamic balancing machine         14.       Thermal Engineering Laboratory       11. Thermal conductivity of insulating powder apparatus 1         15.       I.C Engine 2       11. Thermal conductivity of insulating powder apparatus 1         16.       Guarded plate apparatus       11. Thermal convection restical cylinder apparatus 1         16.       Guarded plate apparatus       11. C Engine 2         17.       Natural convection inside tube apparatus       11. C Engine 2         18.       Emissivity measurement apparatus       12. C Engine 2         19.       Data Acquisition system with any one of the above engines       20. Composite wall apparatus <td></td> <td></td> <td></td>   |     |  |     |                              |
| 14.       11. Dynamic balancing machine         14.       Thermal Engineering Laboratory       11. 4-stroke Diesel Engine with mechanical loading         14.       Thermal Engineering Laboratory       11. 4-stroke Diesel Engine with electrical loading         14.       Thermal Engineering Laboratory       11. 4-stroke Diesel Engine with mechanical loading         14.       Thermal Engineering Laboratory       11. 4-stroke Diesel Engine with electrical loading         14.       Thermal Engineering Laboratory       11. 4-stroke Diesel Engine with electrical loading         14.       Thermal Engineering Laboratory       11. 0         15.       Thermal convection vertical cylinder apparatus       11. 1         16.       Guarded plate apparatus       11. 1         17.       Forced convection inside tube apparatus       11. 1         18.       Emissivity measurement apparatus       12. 0         19.       Data Acquisition system with any one of the above engines       20. 0   |     |  |     |                              |
| 12. Cam follower setup         14.         15.         16.         16.         17.         17.         18.         19.         19.         11.         11.         12.         13.         14.         14.         15.  |     |  |     |                              |
| <ul> <li>1. 4-stroke Diesel Engine with mechanical loading</li> <li>2. 4-stroke Diesel Engine with hydraulic loading</li> <li>3. 4-stroke Diesel Engine with hydraulic loading</li> <li>3. 4-stroke Diesel Engine with electrical loading</li> <li>4. Parallel/counter flow heat exchanger apparatus</li> <li>5. Pin-fin apparatus</li> <li>6. Refrigeration test rig</li> <li>7. Single cylinder Petrol Engine</li> <li>8. Single/two stage reciprocating air compressor</li> <li>9. Steam Boiler with turbine setup</li> <li>10. Stefan-Boltzmann apparatus</li> <li>11. Thermal conductivity of insulating powder apparatus 1</li> <li>12. Natural convection-vertical cylinder apparatus</li> <li>13. Multi-cylinder Petrol Engine</li> <li>14. Lagged pipe apparatus</li> <li>15. LC Engine 2 stroke and 4 stroke model</li> <li>16. Guarded plate apparatus</li> <li>17. Forced convection inside tube apparatus</li> <li>18. Emissivity measurement apparatus</li> <li>19. Data Acquisition system with any one of the above engines</li> <li>20. Composite wall apparatus</li> <li>21. Apparatus for Flash and Fire</li> </ul>  |     |  |     |                              |
| <ul> <li>14.</li> <li>14.</li> <li>14.</li> <li>14. Thermal Engineering Laboratory</li> <li>2. 4-stroke Diesel Engine with hydraulic loading</li> <li>3. 4-stroke Diesel Engine with electrical loading</li> <li>4. Parallel/counter flow heat exchanger apparatus</li> <li>5. Pin-fin apparatus</li> <li>6. Refrigeration test rig</li> <li>7. Single cylinder Petrol Engine</li> <li>8. Single/two stage reciprocating air compressor</li> <li>9. Steam Boiler with turbine setup</li> <li>10. Stefan-Boltzmann apparatus</li> <li>11. Thermal conductivity of insulating powder apparatus 1</li> <li>12. Natural convection-vertical cylinder apparatus</li> <li>13. Multi-cylinder Petrol Engine</li> <li>14. Lagged pipe apparatus</li> <li>15. I.C Engine 2 stroke and 4 stroke model</li> <li>16. Guarded plate apparatus</li> <li>17. Forced convection inside tube apparatus</li> <li>18. Emissivity measurement apparatus</li> <li>19. Data Acquisition system with any one of the above engines</li> <li>20. Composite wall apparatus</li> <li>21. Apparatus for Flash and Fire</li> </ul>   |     |  |     |                              |
| <ul> <li>14.</li> <li>14.</li> <li>14. Thermal Engineering Laboratory</li> <li>3. 4-stroke Diesel Engine with electrical loading</li> <li>4. Parallel/counter flow heat exchanger apparatus</li> <li>5. Pin-fin apparatus</li> <li>6. Refrigeration test rig</li> <li>7. Single cylinder Petrol Engine</li> <li>8. Single/two stage reciprocating air compressor</li> <li>9. Steam Boiler with turbine setup</li> <li>10. Stefan-Boltzmann apparatus</li> <li>11. Thermal conductivity of insulating powder apparatus 1</li> <li>12. Natural convection-vertical cylinder apparatus</li> <li>13. Multi-cylinder Petrol Engine</li> <li>14. Lagged pipe apparatus</li> <li>15. I.C Engine 2 stroke and 4 stroke model</li> <li>16. Guarded plate apparatus</li> <li>17. Forced convection inside tube apparatus</li> <li>18. Emissivity measurement apparatus</li> <li>19. Data Acquisition system with any one of the above engines</li> <li>20. Composite wall apparatus</li> <li>21. Apparatus for Flash and Fire</li> </ul>  |     |  |     |                              |
| <ul> <li>14. Parallel/counter flow heat exchanger apparatus</li> <li>5. Pin-fin apparatus</li> <li>6. Refrigeration test rig</li> <li>7. Single cylinder Petrol Engine</li> <li>8. Single/two stage reciprocating air compressor</li> <li>9. Steam Boiler with turbine setup</li> <li>10. Stefan-Boltzmann apparatus</li> <li>11. Thermal conductivity of insulating powder apparatus 1</li> <li>12. Natural convection-vertical cylinder apparatus</li> <li>13. Multi-cylinder Petrol Engine</li> <li>14. Lagged pipe apparatus</li> <li>15. I.C Engine 2 stroke and 4 stroke model</li> <li>16. Guarded plate apparatus</li> <li>17. Forced convection inside tube apparatus</li> <li>18. Emissivity measurement apparatus</li> <li>19. Data Acquisition system with any one of the above engines</li> <li>20. Composite wall apparatus</li> <li>21. Apparatus for Flash and Fire</li> </ul>  |     |  |     |                              |
| <ul> <li>14. Thermal Engineering Laboratory</li> <li>14. Thermal Engineering Laboratory</li> <li>5. Pin-fin apparatus</li> <li>6. Refrigeration test rig</li> <li>7. Single cylinder Petrol Engine</li> <li>8. Single/two stage reciprocating air compressor</li> <li>9. Steam Boiler with turbine setup</li> <li>10. Stefan-Boltzmann apparatus</li> <li>11. Thermal conductivity of insulating powder apparatus 1</li> <li>12. Natural convection-vertical cylinder apparatus</li> <li>13. Multi-cylinder Petrol Engine</li> <li>14. Lagged pipe apparatus</li> <li>15. I.C Engine 2 stroke and 4 stroke model</li> <li>16. Guarded plate apparatus</li> <li>17. Forced convection inside tube apparatus</li> <li>18. Emissivity measurement apparatus</li> <li>19. Data Acquisition system with any one of the above engines</li> <li>20. Composite wall apparatus</li> <li>21. Apparatus for Flash and Fire</li> </ul>  |     |  |     |                              |
| <ul> <li>14. Thermal Engineering Laboratory</li> <li>6. Refrigeration test rig</li> <li>7. Single cylinder Petrol Engine</li> <li>8. Single/two stage reciprocating air compressor</li> <li>9. Steam Boiler with turbine setup</li> <li>10. Stefan-Boltzmann apparatus</li> <li>11. Thermal conductivity of insulating powder apparatus 1</li> <li>12. Natural convection-vertical cylinder apparatus</li> <li>13. Multi-cylinder Petrol Engine</li> <li>14. Lagged pipe apparatus</li> <li>15. I.C Engine 2 stroke and 4 stroke model</li> <li>16. Guarded plate apparatus</li> <li>17. Forced convection inside tube apparatus</li> <li>18. Emissivity measurement apparatus</li> <li>19. Data Acquisition system with any one of the above engines</li> <li>20. Composite wall apparatus</li> <li>21. Apparatus for Flash and Fire</li> </ul>  |     |  |     |                              |
| <ul> <li>14. Thermal Engineering Laboratory</li> <li>14. Thermal Engineering Laboratory</li> <li>7. Single cylinder Petrol Engine</li> <li>8. Single/two stage reciprocating air compressor</li> <li>9. Steam Boiler with turbine setup</li> <li>10. Stefan-Boltzmann apparatus</li> <li>11. Thermal conductivity of insulating powder apparatus 1</li> <li>12. Natural convection-vertical cylinder apparatus</li> <li>13. Multi-cylinder Petrol Engine</li> <li>14. Lagged pipe apparatus</li> <li>15. I.C Engine 2 stroke and 4 stroke model</li> <li>16. Guarded plate apparatus</li> <li>17. Forced convection inside tube apparatus</li> <li>18. Emissivity measurement apparatus</li> <li>19. Data Acquisition system with any one of the above engines</li> <li>20. Composite wall apparatus</li> <li>21. Apparatus for Flash and Fire</li> </ul>   |     |  |     |                              |
| <ul> <li>14. Thermal Engineering Laboratory</li> <li>8. Single/two stage reciprocating air compressor</li> <li>9. Steam Boiler with turbine setup</li> <li>10. Stefan-Boltzmann apparatus</li> <li>11. Thermal conductivity of insulating powder apparatus 1</li> <li>12. Natural convection-vertical cylinder apparatus</li> <li>13. Multi-cylinder Petrol Engine</li> <li>14. Lagged pipe apparatus</li> <li>15. I.C Engine 2 stroke and 4 stroke model</li> <li>16. Guarded plate apparatus</li> <li>17. Forced convection inside tube apparatus</li> <li>18. Emissivity measurement apparatus</li> <li>19. Data Acquisition system with any one of the above engines</li> <li>20. Composite wall apparatus</li> <li>21. Apparatus for Flash and Fire</li> </ul>   |     |  |     |                              |
| <ul> <li>14. Thermal Engineering Laboratory</li> <li>9. Steam Boiler with turbine setup</li> <li>10. Stefan-Boltzmann apparatus</li> <li>11. Thermal conductivity of insulating powder apparatus 1</li> <li>12. Natural convection-vertical cylinder apparatus</li> <li>13. Multi-cylinder Petrol Engine</li> <li>14. Lagged pipe apparatus</li> <li>15. I.C Engine 2 stroke and 4 stroke model</li> <li>16. Guarded plate apparatus</li> <li>17. Forced convection inside tube apparatus</li> <li>18. Emissivity measurement apparatus</li> <li>19. Data Acquisition system with any one of the above engines</li> <li>20. Composite wall apparatus</li> <li>21. Apparatus for Flash and Fire</li> </ul>   |     |  |     |                              |
| <ul> <li>14. Thermal Engineering Laboratory</li> <li>10. Stefan-Boltzmann apparatus</li> <li>11. Thermal conductivity of insulating powder apparatus 1</li> <li>12. Natural convection-vertical cylinder apparatus</li> <li>13. Multi-cylinder Petrol Engine</li> <li>14. Lagged pipe apparatus</li> <li>15. I.C Engine 2 stroke and 4 stroke model</li> <li>16. Guarded plate apparatus</li> <li>17. Forced convection inside tube apparatus</li> <li>18. Emissivity measurement apparatus</li> <li>19. Data Acquisition system with any one of the above engines</li> <li>20. Composite wall apparatus</li> <li>21. Apparatus for Flash and Fire</li> </ul>   |     |  |     |                              |
| <ul> <li>14. Thermal Engineering Laboratory</li> <li>11. Thermal conductivity of insulating powder apparatus 1</li> <li>12. Natural convection-vertical cylinder apparatus</li> <li>13. Multi-cylinder Petrol Engine</li> <li>14. Lagged pipe apparatus</li> <li>15. I.C Engine 2 stroke and 4 stroke model</li> <li>16. Guarded plate apparatus</li> <li>17. Forced convection inside tube apparatus</li> <li>18. Emissivity measurement apparatus</li> <li>19. Data Acquisition system with any one of the above engines</li> <li>20. Composite wall apparatus</li> <li>21. Apparatus for Flash and Fire</li> </ul>   |     |  |     |                              |
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| <ul> <li>12. Natural convection-vertical cylinder apparatus</li> <li>13. Multi-cylinder Petrol Engine</li> <li>14. Lagged pipe apparatus</li> <li>15. I.C Engine 2 stroke and 4 stroke model</li> <li>16. Guarded plate apparatus</li> <li>17. Forced convection inside tube apparatus</li> <li>18. Emissivity measurement apparatus</li> <li>19. Data Acquisition system with any one of the above engines</li> <li>20. Composite wall apparatus</li> <li>21. Apparatus for Flash and Fire</li> </ul>  | 14. | Thermal Engineering Laboratory         |     |                              |
| <ul> <li>14. Lagged pipe apparatus</li> <li>15. I.C Engine 2 stroke and 4 stroke model</li> <li>16. Guarded plate apparatus</li> <li>17. Forced convection inside tube apparatus</li> <li>18. Emissivity measurement apparatus</li> <li>19. Data Acquisition system with any one of the above engines</li> <li>20. Composite wall apparatus</li> <li>21. Apparatus for Flash and Fire</li> </ul>  |     |  |     |                              |
| <ul> <li>15. I.C Engine 2 stroke and 4 stroke model</li> <li>16. Guarded plate apparatus</li> <li>17. Forced convection inside tube apparatus</li> <li>18. Emissivity measurement apparatus</li> <li>19. Data Acquisition system with any one of the above engines</li> <li>20. Composite wall apparatus</li> <li>21. Apparatus for Flash and Fire</li> </ul>   |     |  |     |                              |
| <ul> <li>16. Guarded plate apparatus</li> <li>17. Forced convection inside tube apparatus</li> <li>18. Emissivity measurement apparatus</li> <li>19. Data Acquisition system with any one of the above engines</li> <li>20. Composite wall apparatus</li> <li>21. Apparatus for Flash and Fire</li> </ul>   |     |  |     |                              |
| <ul> <li>17. Forced convection inside tube apparatus</li> <li>18. Emissivity measurement apparatus</li> <li>19. Data Acquisition system with any one of the above engines</li> <li>20. Composite wall apparatus</li> <li>21. Apparatus for Flash and Fire</li> </ul>  |     |  |     |                              |
| <ol> <li>Emissivity measurement apparatus</li> <li>Data Acquisition system with any one of the above engines</li> <li>Composite wall apparatus</li> <li>Apparatus for Flash and Fire</li> </ol>   |     |  |     |                              |
| <ol> <li>Data Acquisition system with any one of the above engines</li> <li>Composite wall apparatus</li> <li>Apparatus for Flash and Fire</li> </ol>   |     |  |     |                              |
| 20. Composite wall apparatus21. Apparatus for Flash and Fire  |     |  |     |                              |
| 21. Apparatus for Flash and Fire  |     |  |     |                              |
|   |     |  |     |                              |
|   |     |  |     |                              |
| 22. Air-conditioning test rig   |     |  |     | Air-conditioning test rig    |

| 1.       Surface finish measuring equipment         2.       Vernic Height Gauge         3.       Vernic Height Gauge         3.       Vernic Height Gauge         3.       Wernic Height Gauge         3.       Wernic Height Gauge         3.       Wernic Height Gauge         4.       Silip Gauge Stat         6.       Parallel / consumer         7.       Parallel / consumer         8.       Micrometer         11.       Borg ange         12.       Coordinate measuring machine         13.       Hoat Structures         14.       Borg ange         15.       Meaning Setup         16.       CAD/CAM Laboratory         16.       CAD/CAM Laboratory         16.       CAD/CAM Laboratory         16.       CAD/CAM Laboratory         17.       Problem Solving and Python         7.       Network for machine         17.       Problem Solving and Python         7.       Systems with Python (3 interpreter for         18.       Data Structures Laboratory       2.         19.       Digital System Laboratory       1.         19.       Digital System Laboratory       2.  |          |                                    | T  |  |
|--|----------|------------------------------------|----|--|
| 3. Vernier Height Gauge         3. Silp Gauge Set         3. Silp Gauge Set         5. Sile Bar         Porfile Projector / Tool Makers Microscope         7. Parallel / counter flow heat exchanger apparatus         8. Micrometer         9. Temperature Measuring Setup         10. Autocollimator         11. Bore gauge         12. Conduct measuring machine         13. For Warler         14. Four Warler         15. CAD/CAM Laboratory         16. CAD/CAM Laboratory         17. Problem Solving and Python         7. Problem Solving and Python         7. Problem Solving and Python         7. Software HL, simulator         18. Data Structures Laboratory         19. Digital CS         20. Object Oriented Programming         21. Database Management Systems         22. Networks Laboratory         23. Software HL, simulator         24. Microscenter and Prophen Programming         25. Object Oriented Programming         26. Object Oriented Programming         27. Networks Laboratory   |          |                                    |    |  |
| 15.       Metrology and Measurements<br>Laboratory       4.       Sine Bar<br>Polific Projector / Tool Makers Microscope         15.       Metrology and Measurements<br>Laboratory       7.       Prailal / counter flow heat exchanger apparatus<br>Microscope         16.       CAD/CAM Laboratory       1.       Bine Bar<br>Polific Projector / Tool Makers Microscope         16.       CAD/CAM Laboratory       1.       Computer Measuring Setup         16.       CAD/CAM Laboratory       1.       Computer Measuring Computer CAM<br>Programming and tool past simulation for FANUC / Simunetic<br>and Infedentian concoller)         16.       CAD/CAM Laboratory       1.       Computer Measuring Computer Setup         17.       Problem Solving and Python<br>Programming Laboratory       1.       Standalone destrops with Python (3 interpreter for<br>Windows Linux)         18.       Data Structures Laboratory       1.       Standalone destrops with Python (3 interpreter for<br>Windows Linux)         18.       Data Structures Laboratory       1.       Suppost for Calific Advances (2 mindows Linux)         19.       Digital System Laboratory       1.       Systems with Linux Operating System with guu compiler         19.       Digital System Samagement Systems       1.       Server with Standalone destrops with Python (3 interpreter for<br>Windows Linux)         20.       Object Oriented Programming<br>Laboratory       1.       Systems wit  |          |                                    |    |  |
| 15.       Sine Har         15.       Metrology and Measurements<br>Laboratory       5.         16.       CAD/CAM Laboratory         16.       CAD/CAM Laboratory         16.       CAD/CAM Laboratory         17.       Problem Solving and Python<br>Programming Laboratory         18.       Data Structures Laboratory         19.       Digital System Laboratory         10.       CAD/CAM Laboratory         11.       Roce gauge         12.       Licensed operating system         13.       Support for CAPP         14.       CAM Solvare for machining centre and turning centre (CNC<br>Programming and tool path simulation for FANUC / Simmeric<br>and Heidenhain controllery         16.       CAD/CAM Laboratory         17.       Problem Solving and Python<br>Programming Laboratory         18.       Data Structures Laboratory         19.       Digital System Laboratory         19.       Digital System Laboratory         19.       Digital System Laboratory         19.       Digital System Simulation for CAPP         20.       Object Oriented Programming<br>Laboratory         21.       Problem Solving and Python<br>Programming Laboratory         22.       Networks Laboratory         23.       System Vin Ware Sys  |          |                                    |    |  |
| 15.       Metrology and Measurements<br>Laboratory       6.       Profile Projector / Tool Makers Microscope<br>7.         15.       Metrology and Measurements<br>Laboratory       7.       Praniel/ counter flow heat exchanger apparatus<br>8.         16.       Coordinate measuring Setup<br>10.       8.       7.         16.       CAD/CAM Laboratory       1.       Bore gauge<br>12.       Coordinate measuring Setup<br>13.         16.       CAD/CAM Laboratory       2.       Literased op CAP system<br>13.       Computer<br>14.       Force Measuring Setup<br>15.         16.       CAD/CAM Laboratory       2.       Literased op CAP system<br>2.       Literased op CAP system<br>2.         16.       CAD/CAM Laboratory       5.       High end integrated modeling and manufacturing CAD / CAM<br>software for machining centre and tuning centre of CAP<br>4.         17.       Problem Solving and Python<br>Programming Laboratory       5.       High end integrated modeling and manufacturing CAD / CAM<br>software         18.       Data Structures Laboratory       1.       Sumalone desktops with Python (3 interpreter for<br>Windows Linux)         18.       Data Structures Laboratory       1.       Systems with Linux Operating System with gau compiler         19.       Digital System Laboratory       2.       Software file compatibulation of the server         20.       Object Oriented Programming<br>Laboratory       1.   |          |                                    |    |  |
| 15.       Metrology and Measurements         15.       Metrology and Measurements         16.       Coordination reassaring machine         17.       Prailed / counter flow beat exchanger apparatus         18.       Metrology and Measurements         16.       CAD/CAM Laboratory         16.       CAD/CAM Laboratory         16.       CAD/CAM Laboratory         17.       Problem Solving and Python         18.       Data Structures Laboratory         19.       Digital System Laboratory         10.       CXC Laber         11.       Digital System Laboratory         12.       Problem Solving and Python         17.       Problem Solving and Python         18.       Data Structures Laboratory         19.       Digital System Laboratory         12.       System Structures Laboratory         13.       System Structures Laboratory         14.       Digital System Laboratory         15.       System Structures Laboratory         16.       Data Structures Laboratory         17.       Problem Solving and Python         17.       Problem Solving and Python         18.       Data Structures Laboratory         19.       Digital a  |          |                                    |    |  |
| 15.       Metrology and Measurements<br>Laboratory       8.       Microneter<br>Temperature Measuring Setup         16.       Decide and the measuring methine<br>Setup       13.       Setup         16.       CAD/CAM Laboratory       13.       Setup         16.       CAD/CAM Laboratory       14.       Foreign Carbonathine<br>13.       Setup         16.       CAD/CAM Laboratory       11.       Setup Setup       Setup         17.       Problem Solving and Python<br>Problem Solving and Python       11.       Setup Setup         17.       Problem Solving and Python<br>Programming Laboratory       1.       Systems with Setup         18.       Data Structures Laboratory       1.       Systems with System Vindows Linux)         18.       Data Structures Laboratory       1.       Systems with System Vindows Linux)         19.       Digital System Laboratory       1.       Systems with System Vindows Linux)         22.       Networks Laboratory       1.       Systems with MyGal         23.       Microprocessor and Microcontroller<br>Laboratory       1.       Systems with MyGal         23.       Microprocessor and Microcontroller<br>Laboratory       1.       Systems with Window System Sister Sistere Sistere Sister Sister Sistere Sister Sister Sister S   |          |                                    |    |  |
| 15.       Metrology and Measurements       9.       Temperature Measuring Setup         16.       Laboratory       9.       Temperature Measuring Setup         17.       Hoor gauge       10.       Autocolimator         18.       Folding Carriage Micrometer       11.         19.       Gear Tool Venier       16.         10.       Netrology and Learning Setup       15.         11.       Force Measuring Setup       15.         11.       Force Measuring Setup       16.         11.       Computer       11.         11.       Evenier Caliper       10.         11.       Support for CAPP       11.         11.       Canputer       11.         11.       Support for CAPP       11.         11.       Canputer nodes or system       11.         11.       Support for CAPP       11.         11.       Canboratory       11.       11.         11.       Support for CAPP       11.         <  |          |                                    |    |  |
| 10.       Laboratory       10. Autocollinator         11.       Bor agoge       12. Coordinate measuring machine         12.       Laboratory       13. Floating Carriage Micrometer         14.       Force Measuring Setup       15. Gear Tool Vernier         16.       Computer       19. Telescope gauge         17.       Torque Measuring Setup       18. Computer         18.       Telescope gauge       1. Computer         19.       Telescope gauge       1. Computer         10.       Autocollination for CAPP       1. Computer         10.       CAD/CAM Laboratory       2. Lensed operating system         16.       CAD/CAM Laboratory       3. Support for CAPP         16.       CAD/CAM Laboratory       5. High end integrated modeling and manufacturing CAD / CAM software for machining centre and turning centre (CNC Programming and tool path simulation for FANUC / Simumerie and Higher and tool path simulation for FANUC / Simumerie and Higher and tool path simulation for CAM / CAM software for machining centre and turning centre (CNC Programming Laboratory         17.       Problem Solving and Python Programming Laboratory       1. Standalone desktops with Python (3 interpreter for WindowsLinux)         18.       Data Structures Laboratory       1. Signal Studio       1. Standalone desktops         19.       Digital System Laboratory       1. Standalone desktops   |          |                                    |    |  |
| Laboratory       11. Bore gauge         12. Coordinate measuring machine         13. Floating Carriage Micrometer         14. Force Measuring Setup         15. Gear Tooth Venitier         16. Mechanical / Electrical / Pneumatic Comparator         17. Torque Measuring Setup         18. Veniter Caliper         19. Telescope gauge         11. Bore gauge         11. Computer         12. Conducted to the server         13. Support of CAPP         14. Computer modes or systems (High end CPU with atleast 1 GB main memory)         15. Computer modes or systems (High end CPU with atleast 1 GB main memory)         16. CN milling machine         11. CNC Lathe         17. Problem Solving and Python         11. Standalone desktops with Python (3 interpreter for WindowyLinux)         18. Data Structures Laboratory       1. Standalone desktops with sput compiler         19. Digital System Laboratory       1. Digital ICS         20. Object Oriented Programming Laboratory       2. Software: HDL simulator         21. Database Managem  | 15.      | Metrology and Measurements         |    |  |
| 12. Coordinate measuring machine         13. Floating Carriage Micrometer         14. Force Measuring Setup         15. Gear Tool Vernier         16. CAD/CAM Laboratory         16.         CAD/CAM Laboratory         16.         CAD/CAM Laboratory         16.         CAD/CAM Laboratory         17.         18.         Vernier Caliper         19.         10.         CAD/CAM Laboratory         10.         116.         CAD/CAM Laboratory         116.         CAD/CAM Laboratory         117.         Problem Solving and Python         118.       Data Structures Laboratory         110.       CNC milling machine         1117.       Problem Solving and Python         118.       Data Structures Laboratory         118.       Data Structures Laboratory         119.       Digital System Laboratory         110.       Digital System Structures Laboratory         12.       Systems with Linux Operating System with guu compiler         19.       Digital System Laboratory         10.       Digital rinner kits         20.       Object Ori   |          | Laboratory                         |    |  |
| 13. Floating Carriage Micrometer         4. Force Measuring Setup         15. Gear Tools Vernier         16. Mechanical Fleetrical / Pneumatic Comparator         17. Torque Measuring Setup         18. Vernier Culiper         19. Telescope gauge         10. COmputer         11. Computer         11. Computer         11. CAM Software for machining centre and turning centre (CNC Programming and tool path simulation for FANUC / Simumeric and Heidenhain controller)         11. Torque Measuring Setup         11. CAD/CAM Laboratory         21. High end integrated modeling and manufacturing CAD / CAM software for rachining centre (CNC Programming and tool path simulation for FANUC / Simumeric and Heidenhain controller)         21. High end CPU with atleast 1 GB main memory         22. Network to the server         3. A 3 size plotter         23. Lase Printer         24. Server with Python (3 interpreter for Windows/Linux)         25. Server with Python (3 interpreter for Windows/Linux)         26. Object Oriented Programming Laboratory       1. Standalone destrops with Python (3 interpreter for Windows/Linux)         21. Digital System Laboratory       1. Digital ICS         22. Networks Laboratory       1. Surgeon the server         3. Systems with Linux Operating System with gau compiler         21. Digital System Laboratory       1. Server  |          | Lucolulory                         |    |  |
| 14. Force Measuring Steap         15. Gear Tooh Vernier         16. Mechanical / Electrical / Penematic Comparator         17. Torque Measuring Setup         18. Vernier Caliper         19. Telescope gauge         11. Computer         2. Licensed operating system         3. Support for CAPF         4. CAD/CAM Laboratory         5. High end integrated modeling and manufacturing CAD / CAM software         6. Computer nodes or systems (High end CPU with atleast 1 GB main memory)         7. networked to the server         8. A3 size plotter         9. Laser Printer         10. CNC milling machine         11. CNC Lathe         11. Standalone desktops with Python (3 interpreter for Windows/Linux)         18. Data Structures Laboratory         19. Digital System Laboratory         10. Object Oriented Programming Laboratory         11. Standalone desktops         12. Server with Python (3 interpreter for Windows/Linux)         13. Data Structures Laboratory         14. Sortware: HDL simulator         20. Object Oriented Programming Laboratory         21. Database Management Systems         22. Networks Laboratory         23. Systems with Linux Operating System Vervork Simulator ill Standalone Desktops         24. Networks Laboratory   |          |                                    |    |  |
| 15.       Geur Tooth Verrier         16.       Mechanical / Electrical / Pneumatic Comparator         17.       Torque Measuring Setup         18.       Verrier Caliper         19.       Telescope gauge         10.       Opputer         2.       Licensed operating system         3.       Support for CAPP         4.       CAM Software for machining centre and turning centre (CNC Programming and tool path simulation for PANUC / Simulation and manufacturing CAD / CAM software         16.       CAD/CAM Laboratory         17.       Problem Solving and Python         17.       Problem Solving and Python         18.       Data Structures Laboratory         18.       Data Structures Laboratory         19.       Digital System Laboratory         19.       Digital System Laboratory         19.       Digital System Laboratory         11.       Database Management Systems         12.       Systems with Chinor Nerging System with grue compiler         13.       Systems with Chinor Comparing System setup         14.       Database Management Systems         15.       Systems with Chinor Compiler Network Simulator         16.       Systems with chine Netheans or Eclipse         11.       Database   |          |                                    |    |  |
| 16.         McAmical / Electrical / Pneumatic Comparator           17.         Torgue Mcasuring Setup           18.         Venier Caliper           19.         Telescope agree           11.         Computer           21.         Licensed operating system           3.         Support for CAPP           4.         CAM Software for machining centre and turning ce  |          |                                    |    |  |
| 16.       CAD/CAM Laboratory       1.       Computer         16.       CAD/CAM Laboratory       2.       Licensed operating system         16.       CAD/CAM Laboratory       3.       Support for CAPP         16.       CAD/CAM Laboratory       4.       CAM Software for machining centre and turning centre (CNC Programming and tool path simulation for FANUC / Simunetic and Hidenhain controller)         16.       CAD/CAM Laboratory       5.       High end integrated modeling and manufacturing CAD / CAM software         17.       Problem Solving and Python       7.       networked to the server       8.         18.       Data Structures Laboratory       1.       Star photon (3. interpreter for Windows/Linux)         18.       Data Structures Laboratory       1.       Systems with Linux Operating System with gnu compiler         19.       Digital System Laboratory       1.       Digital Taboratory       2.         20.       Object Oriented Programming Laboratory       1.       Systems with either Netheans or Eclipse         21.       Database Management Systems Laboratory       2.       Systems with either Netheans or Eclipse         21.       Database Management Systems Laboratory       1.       Standione Destops         22.       Networks Laboratory       1.       Startine bout onpatible with 8086 & 8051 kits   |          |                                    |    |  |
| 18. Vernier Caliper         19. Telescope gauge         11. Computer         2. Licensed operating system         3. Support for CAPP         4. CAM Software for machining centre and turning centre (CNC Programming and tool path simulation for FANUC/ Simumeric and Heidenbain controller)         16.         16.         CAD/CAM Laboratory         2.         2.         2.         2.         2.         2.         2.         2.         2.         2.         2.         2.         3.         3.         2.         3.         3.         3.         3.         3.         3.         3.         3.         3.         4.         5.         4.         5.         4.         6.         6.         7.         7.         7.         7.         7.         7.         8.         9.  |          |                                    |    |  |
| 19. Telescope gauge           1. Computer           2. Licensed operating system           3. Support for CAPP           4. CAM Software for machining centre and turning centre (CNC<br>Programming and tool path simulation for FANUC/ Simumeric<br>and Heidenhain controller)           16.           17.           Problem Solving and Python<br>Programming Laboratory           18.         Data Structures Laboratory           19.         Digital System Laboratory           18.         Data Structures Laboratory           19.         Digital System Laboratory           11.         Systems with Linux Operating System with gnu compiler           19.         Digital System Laboratory           10.         Digital TcS           20.         Object Oriented Programming<br>Laboratory           21.         Database Management Systems           22.         Networks Laboratory           23.         Microprocessor and Microcontroller           24.         Nicroprocessor and Microcontroller           25.         Networks Laboratory           26   |          |                                    |    |  |
| 16.     CAD/CAM Laboratory     1. Computer       16.     CAD/CAM Laboratory     2. Licursed operating system       16.     CAD/CAM Laboratory     3. Support for CAP       16.     CAD/CAM Laboratory     4. CAM Software for machining centre and fundinhain controller)       17.     Problem Solving and Python<br>Programming Laboratory     5. High end integrated modeling and manufacturing CAD / CAM<br>software       17.     Problem Solving and Python<br>Programming Laboratory     1. Standalone desktops with Python (3 interpreter for<br>Windows/Linux)       18.     Data Structures Laboratory     1. Standalone desktops with Python (3 interpreter for<br>Windows/Linux)       19.     Digital System Laboratory     1. Standalone desktops with Python (3 interpreter for<br>Windows/Linux)       19.     Digital System Laboratory     1. Systems with Linux Operating System with gau compiler       19.     Digital System Laboratory     1. Digital ICs<br>Software: HDL simulator       20.     Object Oriented Programming<br>Laboratory     1. Server<br>Systems with either Netbeans or Eclipse       21.     Database Management Systems<br>Laboratory     1. Server<br>Server       23.     Microprocessor and Microcontroller<br>Laboratory     1. Server<br>Standalone Desktops       23.     Microprocessor and Microcontroller<br>Laboratory     2. Server with Standalone compatible with 8086 & 8051 kits       23.     Microprocessor and Microcontroller<br>Laboratory     3. Systems vith outrol interfacing can   |          |                                    |    |  |
| 16.     CAD/CAM Laboratory     2.     Licensed operating system       16.     CAD/CAM Laboratory     3.     Support for CAPP       16.     CAD/CAM Laboratory     4.     CAM Software for machining centre and turning centre (CNC Programming and tool path simulation for FANUC / Sinumeric and Heidenhain controller)       17.     Problem Solving and Python     7.     networked to the server       18.     Data Structures Laboratory     2.     Server Pintter       19.     Digital System Laboratory     1.     Systems with Python (3 interpreter for Windows/Linux)       18.     Data Structures Laboratory     1.     Systems with Python (3 interpreter for Windows/Linux)       19.     Digital System Laboratory     1.     Systems with Python (3 interpreter for Windows/Linux)       19.     Digital System Laboratory     1.     Systems with CP       20.     Object Oriented Programming Laboratory     2.     Software HDL simulator       21.     Database Management Systems Laboratory     1.     Standalone Desktops       22.     Networks Laboratory     2.     Starver       23.     Microprocessor and Microcontroller Laboratory     2.     Standalone Desktops       23.     Microprocessor and Microcontroller Laboratory     2.     Standalone Desktops       24.     Networks Laboratory     2.     Digital clock interfacing  |          |                                    |    |  |
| 16.       CAD/CAM Laboratory       3. Support for CAPP <sup>1</sup> 16.       CAD/CAM Laboratory       4. CAM Software for machining centre and turning centre (CNC Programming and tool path simulation for FANUC / Sinumeric and Heidenhain controller)         16.       CAD/CAM Laboratory       5. High end integrated modeling and manufacturing CAD / CAM software         16.       CAD/CAM Laboratory       5. High end integrated modeling and manufacturing CAD / CAM software         17.       Problem Solving and Python Programming Laboratory       1. Standalone desktops with Python (3 interpreter for Windows/Linux)         18.       Data Structures Laboratory       1. Systems with Linux Operating System with gnu compiler         19.       Digital System Laboratory       1. Systems with Linux Operating System with gnu compiler         19.       Digital System Laboratory       1. Signatulator         20.       Object Oriented Programming Laboratory       1. Signatulator         21.       Database Management Systems Laboratory       1. Server         22.       Networks Laboratory       1. Server         23.       Microprocessor and Microcontroller Laboratory       1. Server         24.       1. Site and the compatible with 8086 & 8051 kits         23.       Microprocessor and Microcontroller Laboratory       1. Server         24.       1. Siteprer motor control interfacing card compatibl  |          |                                    |    |  |
| 16.       CAM Software for machining centre and turning centre (CNC Programming and tool path simulation for FANUC / Sinumeric and Heidenhain controller)         16.       CAD/CAM Laboratory       5.         16.       CAD/CAM Laboratory       5.         17.       Problem Solving and Python Programming Laboratory       7.         18.       Data Structures Laboratory       1.         18.       Data Structures Laboratory       2.         19.       Digital System Laboratory       1.         11.       Digital System Laboratory       1.         12.       Data Structures Laboratory       1.         13.       Systems with cither Netbeans or Eclipse         14.       Standalone Desktops         15.       Systems with MySql         16.       Standalone Desktops         17.       Problem Solving and Python         18.       Data Structures Laboratory         19.       Digital Taimer Kits   |          |                                    |    |  |
| 16.       CAD/CAM Laboratory       Programming and tool path simulation for FANUC / Sinumeric and Heidenhain controller)         16.       CAD/CAM Laboratory       High end integrated modeling and manufacturing CAD / CAM software         6.       Computer nodes or systems (High end CPU with atleast 1 GB main memory)       networked to the server         8.       A3 size plotter       9.         17.       Problem Solving and Python       1.         17.       Problem Solving and Python       1.         18.       Data Structures Laboratory       2.         19.       Digital System Laboratory       1.         19.       Digital System Laboratory       1.         20.       Object Oriented Programming Laboratory       1.         21.       Data Structures Laboratory       1.         22.       Networks Laboratory       1.         23.       Systems with Systems Laboratory       1.         24.       Networks Laboratory       1.         25.       Networks Laboratory       1.         26.       Object Oriented Programming Laboratory       1.         27.       Database Management Systems       1.         28.       Systems with MySql       3.         29.       Networks Laboratory       1. <td></td> <td></td> <td></td> <td></td>  |          |                                    |    |  |
| 16.       CAD/CAM Laboratory       and Heidenhain controller)         5.       High end integrated modeling and manufacturing CAD / CAM software         6.       Computer nodes or systems (High end CPU with atleast 1 GB main memory)         7.       networked to the server         8.       A3 size plotter         9.       Laser Printer         10.       CNC milling machine         11.       CNC Lathe         11.       Data Structures Laboratory         12.       Server with Python (3 interpreter for Windows/Linux)         13.       Data Structures Laboratory         14.       Digital System Laboratory         15.       Software: HDL simulator         20.       Object Oriented Programming Laboratory         21.       Database Management Systems Laboratory         22.       Networks Laboratory         23.       Microprocessor and Microcontroller Laboratory         23.       Microprocessor and Microcontroller Laboratory         23.       Networks Laboratory         23.       Microprocessor and Microcontroller Laboratory <td></td> <td></td> <td>4.</td> <td></td>   |          |                                    | 4. |  |
| 16.       CAD/CAM Laboratory       5.       High end integrated modeling and manufacturing CAD / CAM software         6.       Computer nodes or systems (High end CPU with atleast 1 GB main memory)       7.       networked to the server         8.       A3 size plotter       9.       Laser Printer         10.       CNC milling machine       11.       CNC milling machine         11.       CNC milling machine       11.       CNC milling machine         11.       Standalone desktops with Python (3 interpreter for Windows/Linux)         18.       Data Structures Laboratory       1.       Standalone desktops with Python (3 interpreter for Windows/Linux)         19.       Digital System Laboratory       1.       Digital CS         20.       Object Oriented Programming Laboratory       2.       Software         21.       Database Management Systems       1.       Server         22.       Networks Laboratory       1.       Standalone Desktops         22.       Networks Laboratory       1.       Standalone Desktops         23.       Microprocessor and Microcontroller Laboratory       1.       Standalone Desktops         23.       Microprocessor and Microcontroller Laboratory       1.       Standalone Desktops         23.       Microprocessor and Microcontroller Laborator   |          |                                    |    |  |
| 10.       CAD/CAM Laboratory       software         6.       Computer nodes or systems (High end CPU with atleast 1 GB main memory)         7.       networked to the server         8.       A3 size plotter         9.       Laser Printer         10.       CNC Lathe         117.       Problem Solving and Python         118.       Data Structures Laboratory         118.       Data Structures Laboratory         119.       Digital System Laboratory         120.       Object Oriented Programming Laboratory         13.       Systems with Linux Operating System with gnu compiler         19.       Digital System Laboratory         20.       Object Oriented Programming Laboratory         21.       Database Management Systems         22.       Networks Laboratory         23.       Systems Laboratory         23.       Systems Control terfacing compatible with 8086 & 8051 kits         23.       Microprocessor and Microcontroller         23.       Microprocessor and Microcontroller         23.       Nieroprocessor and Microcontroller         23.       Nieroprocessor and Microcontroller         23.       Microprocessor and Microcontroller         24.       Notanal Parallel interfacing car   |          |                                    | 5  |  |
| 6.       Computer nodes or systems (High end CPU with atleast 1 GB main memory)         7.       networked to the server         8.       A3 size plotter         9.       Laser Printer         10.       CNC milling machine         11.       CNC Lathe         13.       Data Structures Laboratory         18.       Data Structures Laboratory         19.       Digital System Laboratory         19.       Digital System Laboratory         11.       Digital Cs         20.       Object Oriented Programming<br>Laboratory         21.       Database Management Systems<br>Laboratory         22.       Networks Laboratory         23.       Microprocessor and Microcontroller<br>Laboratory         24.       Printer interfacing card compatible with 8086 & 8051 kits         33.       System and Parallel interfacing card compatible with 8086 & 8051 kits         34.       Streplan dan Parallel interfacing card compatible with 8086  | 16.      | CAD/CAM Laboratory                 | 5. |  |
| main memory)       7. networked to the server         8. A3 size plotter       9. Laser Printer         10. CNC milling machine       11. CNC Lathe         11. CNC Lathe       11. CNC Lathe         12. Server with Python (3 interpreter for Windows/Linux)       2. Server with Python (3 interpreter for Windows/Linux)         18. Data Structures Laboratory       1. Systems with Linux Operating System with gnu compiler         19. Digital System Laboratory       1. Digital ICs         20. Object Oriented Programming<br>Laboratory       1. Systems with either Netbeans or Eclipse         21. Database Management Systems       1. Server         22. Networks Laboratory       1. Server         23. Microprocessor and Microcontroller<br>Laboratory       1. Standalone Desktops         23. Microprocessor and Microcontroller       2. Software: HDL simulator still solos & 8051 kits         3. Suboratory       2. Server         23. Microprocessor and Microcontroller       1. Microcontroller trainer kit         24. Microprocessor and Microcontroller       2. Software Subal solos & 8051 kits         3. Suboratory       3. Suboratory and An D/A interfacing card compatible with 8086 & 8051 kits         3. Microprocessor and Microcontroller       2. And D/A interfacing card compatible with 8086 & 8051 kits         3. Suboratory       3. Subplay interface board compatible with 8086 & 8051 kits  |          | Crib/Crivi Euconatory              | 6  |  |
| 7. networked to the server         8. A3 size plotter         9. Laser Printer         10. CNC milling machine         11. CNC Lathe         11. CNC Lathe         11. CNC Lathe         11. Standalone desktops with Python (3 interpreter for Windows/Linux)         18. Data Structures Laboratory         19. Digital System Laboratory         11. Digital System Laboratory         12. Software: HDL simulator         20. Object Oriented Programming Laboratory         11. Digital CS         22. Networks Laboratory         23. Microprocessor and Microcontroller Laboratory         24.  |          |                                    | 0. |  |
| 8. A3 size plotter         9. Laser Printer         17. Problem Solving and Python<br>Programming Laboratory         18. Data Structures Laboratory         19. Digital System Laboratory         19. Digital System Laboratory         11. Standalone desktops with Python (3 interpreter for Windows/Linux)         20. Object Oriented Programming<br>Laboratory         21. Database Management Systems         22. Networks Laboratory         23. Microprocessor and Microcontroller<br>Laboratory         23. Microprocessor and Microcontroller<br>Laboratory         23. Microprocessor and Microcontroller<br>Laboratory         24. Microprocessor and Microcontroller<br>Laboratory  |          |                                    | 7  |  |
| 9.       Laser Printer         10.       CNC milling machine         11.       Standalone desktops with Python (3 interpreter for Windows/Linux)         18.       Data Structures Laboratory         19.       Digital System Laboratory         20.       Object Oriented Programming Laboratory         21.       Database Management Systems         22.       Networks Laboratory         23.       Microprocessor and Microcontroller Laboratory         24.       Microprocessor and Microcontroller         25.       Number Systems         26.       Number System Systems         27.       Microprocessor and Microcontroller         28.       Standalone Desktops         29.       Standalone Desktops         20.       Nicroprocessor and Microcontroller         21.       Standalone Desktops   |          |                                    |    |  |
| 10. CNC milling machine         11. CNC Lathe         12. Standalone desktops with Python (3 interpreter for Windows/Linux)         13. Data Structures Laboratory         14. Digital System Laboratory         15. Standalone the Vertex (Vertex (V  |          |                                    |    |  |
| 11. CNC Lathe         17. Problem Solving and Python<br>Programming Laboratory       1. Standalone dektops with Python (3 interpreter for<br>Windows/Linux)         18. Data Structures Laboratory       1. Systems with Linux Operating System with gnu compiler         19. Digital System Laboratory       1. Digital ICs         20. Object Oriented Programming<br>Laboratory       1. Systems with clinux Operating System with gnu compiler         21. Database Management Systems<br>Laboratory       1. Server         22. Networks Laboratory       1. Standalone Dektops         23. Microprocessor and Microcontroller<br>Laboratory       1. Microcontroller trainer kits         23. Microprocessor and Microcontroller       5. Traffic light control interfacing card compatible with 8086 & 8051 kits         7. A/D and D/A interfacing card compatible with 8086 & 8051 kits       5. Traffic light control interfacing card compatible with 8086 & 8051 kits  |          |                                    |    |  |
| 17.       Problem Solving and Python<br>Programming Laboratory       1.       Standalone desktops with Python (3 interpreter for<br>Windows/Linux)         18.       Data Structures Laboratory       1.       Systems with Linux Operating System with gnu compiler         19.       Digital System Laboratory       1.       Systems with Linux Operating System with gnu compiler         19.       Digital System Laboratory       2.       Software: HDL simulator         20.       Object Oriented Programming<br>Laboratory       1.       Systems with either Netbeans or Eclipse         21.       Database Management Systems<br>Laboratory       1.       Standalone Desktops         22.       Networks Laboratory       1.       Standalone Desktops         23.       Microprocessor and Microcontroller<br>Laboratory       1.       Microprocessor trainer kit with power supply         23.       Microprocessor and Microcontroller<br>Laboratory       2.       Solt kits         24.       Exerver       3.       Microprocessor trainer kit with sols & 8051 kits   |          |                                    |    |  |
| 11.       Programming Laboratory       2.       Server with Python (3 interpreter for Windows/Linux)         18.       Data Structures Laboratory       1.       Systems with Linux Operating System with gnu compiler         19.       Digital System Laboratory       1.       Digital ICs         20.       Object Oriented Programming<br>Laboratory       1.       Systems with either Netbeans or Eclipse         21.       Database Management Systems<br>Laboratory       1.       Server         22.       Networks Laboratory       1.       Server         22.       Networks Laboratory       2.       Systems with MySql         23.       Microprocessor and Microcontroller<br>Laboratory       1.       Stepper motor control interfacing compatible with 8086 & 8051 kits         23.       Microprocessor and Microcontroller<br>Laboratory       5.       Traffic light control interfacing card compatible with 8086 & 8051 kits         24.       6.       Stepper motor control interfacing card compatible with 8086 & 8051 kits       6.  | 17       | Problem Solving and Python         | 1  |  |
| Programming Laboratory       2.       Server with Python (3 interpreter for Windows/Linux)         18.       Data Structures Laboratory       1.       Systems with Linux Operating System with gnu compiler         19.       Digital System Laboratory       2.       Software: HDL simulator         20.       Object Oriented Programming<br>Laboratory       1.       Systems with either Netbeans or Eclipse         21.       Database Management Systems<br>Laboratory       1.       Server         22.       Networks Laboratory       1.       Standalone Desktops         22.       Networks Laboratory       2.       C / C++ / lava / Python / Equivalent Compiler Network Simulator<br>like NS2 / Glomosim / OPNEt / Packet Tracer         23.       Microprocessor and Microcontroller<br>Laboratory       3.       Sustem motor control interfacing compatible with 8086 & 8051 kits         3.       Suster motor control interfacing card compatible with 8086 & 8051 kits       6.       Keyboard & Display interface board compatible with 8086 & 8051 kits         23.       Microprocessor and Microcontroller<br>Laboratory       6.       Keyboard & Display interface doard compatible with 8086 & 8051 kits         3.       Seriel and Parallel interfacing card compatible with 8086 & 8051 kits       9.         24.       Microprocessor and Microcontroller       9.         3.       Seriel and Parallel interfacing card compatibl   | 17.      | <b>C I</b>                         |    |  |
| 19.       Digital System Laboratory       1.       Digital ICs         20.       Object Oriented Programming<br>Laboratory       1.       Digital trainer kits         21.       Database Management Systems<br>Laboratory       1.       Systems with either Netbeans or Eclipse         22.       Networks Laboratory       1.       Standalone Desktops         22.       Networks Laboratory       2.       Standalone Desktops         23.       Microprocessor and Microcontroller<br>Laboratory       1.       Standalone Control interfacing compatible with 8086 & 8051 kits         23.       Microprocessor and Microcontroller<br>Laboratory       1.       Stepper motor control interfacing card compatible with 8086 & 8051 kits         23.       Microprocessor and Microcontroller<br>Laboratory       5.       Traffic light control interfacing card compatible with 8086 & 8051 kits         5.       Tada D/A interfacing card compatible with 8086 & 8051 kits       6.       Keyboard & Display interface board compatible with 8086 & 8051 kits         7.       A/D and D/A interfacing card compatible with 8086 & 8051 kits       9.       Serial and Parallel interfacing card compatible with 8086 & 8051 kits   |          | Programming Laboratory             | 2. |  |
| 19.       Digital System Laboratory       1.       Systems with Linux Operating System with gnu compiler         19.       Digital System Laboratory       1.       Digital ICs         20.       Object Oriented Programming<br>Laboratory       1.       Systems with either Netbeans or Eclipse         21.       Database Management Systems<br>Laboratory       1.       Server         22.       Networks Laboratory       1.       Standalone Desktops         22.       Networks Laboratory       2.       Standalone Desktops         23.       Microprocessor and Microcontroller<br>Laboratory       1.       Stapper motor control interfacing compatible with 8086 & 8051 kits         23.       Microprocessor and Microcontroller<br>Laboratory       2.       Taffic light control interfacing card compatible with 8086 & 8051 kits         24.       24.       24.       24.   | 18.      | Data Straturas Laboratoria         |    |  |
| 19.       Digital System Laboratory       2.       Software: HDL simulator         20.       Object Oriented Programming<br>Laboratory       1.       Systems with either Netbeans or Eclipse         21.       Database Management Systems<br>Laboratory       1.       Server         22.       Networks Laboratory       1.       Standalone Desktops         22.       Networks Laboratory       2.       C / C++ / Java / Python / Equivalent Compiler Network Simulator<br>like NS2 / Glomosim / OPNEt / Packet Tracer         23.       Microprocessor and Microcontroller<br>Laboratory       1.       Stepper motor control interfacing board compatible with 8086 & 8051 kits         23.       Microprocessor and Microcontroller<br>Laboratory       5.       Traffic light control interfacing card compatible with 8086 & 8051 kits         24.       24.       24.       24.  |          | Data Structures Laboratory         | 1. | Systems with Linux Operating System with gnu compiler    |
| 19.       Digital System Laboratory       2.       Software: HDL simulator         20.       Object Oriented Programming<br>Laboratory       1.       Systems with either Netbeans or Eclipse         21.       Database Management Systems<br>Laboratory       1.       Server         22.       Networks Laboratory       2.       Software: HDL simulator         22.       Networks Laboratory       2.       Systems with MySql         23.       Microprocessor and Microcontroller<br>Laboratory       1.       Stepper motor control interfacing compatible with 8086 & 8051 kits         23.       Microprocessor and Microcontroller<br>Laboratory       5.       Traffic light control interfacing card compatible with 8086 & 8051 kits         24.       24.       24.       24.       24.  | 10       |                                    | 1  | Digital ICs  |
| 20.       Object Oriented Programming<br>Laboratory       3.       Digital trainer kits         21.       Database Management Systems<br>Laboratory       1.       Systems with either Netbeans or Eclipse         21.       Database Management Systems       1.       Server         22.       Networks Laboratory       1.       Standalone Desktops         22.       Networks Laboratory       2.       C / C++ / Java / Python / Equivalent Compiler Network Simulator<br>like NS2 / Glomosim / OPNEt / Packet Tracer         23.       Microprocessor and Microcontroller<br>Laboratory       1.       Stepper motor control interfacing board compatible with 8086 &<br>8051 kits         23.       Microprocessor and Microcontroller<br>Laboratory       5.       Traffic light control interfacing card compatible with 8086 &<br>8051 kits         24.       24.       24.   | 19.      | Digital System Laboratory          |    |  |
| 20.       Object Oriented Programming<br>Laboratory       1.       Systems with either Netbeans or Eclipse         21.       Database Management Systems<br>Laboratory       1.       Server         22.       Networks Laboratory       1.       Standalone Desktops         22.       Networks Laboratory       2.       C / C++ / Java / Python / Equivalent Compiler Network Simulator<br>like NS2 / Glomosim / OPNEt / Packet Tracer         23.       Microprocessor and Microcontroller<br>Laboratory       1.       Microprocessor trainer kit         23.       Microprocessor and Microcontroller<br>Laboratory       5.       Traffic light control interfacing compatible with 8086 &<br>8051 kits         24.       Microprocessor and Microcontroller       6.       Keyboard & Display interface board compatible with 8086 &<br>8051 kits  |          | Digital System Eaboratory          |    |  |
| 20.       Laboratory       1. Systems with either Netbeans or Eclipse         21.       Database Management Systems<br>Laboratory       1. Server         22.       Networks Laboratory       1. Standalone Desktops         22.       Networks Laboratory       2. C / C++ / Java / Python / Equivalent Compiler Network Simulator<br>like NS2 / Glomosim / OPNEt / Packet Tracer         23.       Microprocessor and Microcontroller<br>Laboratory       3. Stepper motor control interfacing compatible with 8086 & 8051 kits         23.       Microprocessor and Microcontroller<br>Laboratory       5. Traffic light control interfacing card compatible with 8086 &<br>8051 kits         24.       Printer interfacing card compatible with 8086 & 8051 kits   |          | Object Oriented Dressreaming       | 5. | Digital trailer Kits                                     |
| 21.       Database Management Systems<br>Laboratory       1.       Server         22.       Networks Laboratory       3.       Systems with MySql         22.       Networks Laboratory       2.       C / C++ / Java / Python / Equivalent Compiler Network Simulator<br>like NS2 / Glomosim / OPNEt / Packet Tracer         23.       Microprocessor and Microcontroller<br>Laboratory       1.       Microprocessor trainer kit<br>Stepper motor control interfacing compatible with 8086 &<br>8051 kits         23.       Microprocessor and Microcontroller<br>Laboratory       5.       Traffic light control interfacing card compatible with 8086 &<br>8051 kits         24.       Printer interfacing card compatible with 8086 & 8051 kits   | 20.      | Object Oriented Programming        | 1  | Systems with aither Nathaans or Folince                  |
| 21.       Database Management Systems<br>Laboratory       1.       Server         22.       Networks Laboratory       1.       Standalone Desktops         22.       Networks Laboratory       2.       C / C++ / Java / Python / Equivalent Compiler Network Simulator<br>like NS2 / Glomosim / OPNEt / Packet Tracer         23.       Microprocessor and Microcontroller<br>Laboratory       1.       Stepper motor control interfacing compatible with 8086 &<br>8051 kits         23.       Microprocessor and Microcontroller<br>Laboratory       5.       Traffic light control interfacing card compatible with 8086 &<br>8051 kits         23.       Microprocessor and Microcontroller<br>Laboratory       5.       Traffic light control interfacing card compatible with 8086 &<br>8051 kits         24.       24.       24.   |          | Laboratory                         | 1. | Systems with entier Neibeans of Echpse                   |
| 21.       Database infantagement by sterms         22.       Laboratory         22.       Networks Laboratory         22.       Networks Laboratory         22.       Networks Laboratory         23.       Microprocessor and Microcontroller Laboratory         23.       Microprocessor and Microcontroller Laboratory         23.       Microprocessor and Microcontroller Laboratory         24.       All control interfacing card compatible with 8086 & 8051 kits         5.       Traffic light control interfacing card compatible with 8086 & 8051 kits         6.       Keyboard & Display interface board compatible with 8086 & 8051 kits         7.       A/D and D/A interfacing card compatible with 8086 & 8051 kits         8.       Printer interfacing card compatible with 8086 & 8051 kits         9.       Serial and Parallel interfacing card compatible with 8086 & 8051 kits   | <u> </u> | •                                  | 1  | Comion   |
| 22.       Visual Studio         3.       Systems with MySql         22.       Networks Laboratory         1.       Standalone Desktops         2.       C / C++ / Java / Python / Equivalent Compiler Network Simulator like NS2 / Glomosim / OPNEt / Packet Tracer         1.       Microprocessor and Microcontroller Laboratory         23.       Microprocessor and Microcontroller Laboratory         23.       Microprocessor and Microcontroller Laboratory         24.       Alboratory  | 21.      | Database Management Systems        |    |  |
| 22.       Networks Laboratory       1.       Standalone Desktops         2.       C / C++ / Java / Python / Equivalent Compiler Network Simulator like NS2 / Glomosim / OPNEt / Packet Tracer         1.       Microprocessor and Microcontroller Laboratory       1.         23.       Microprocessor and Microcontroller Laboratory       1.         6.       Keyboard & Display interfacing card compatible with 8086 & 8051 kits         6.       Keyboard & Display interface board compatible with 8086 & 8051 kits         7.       A/D and D/A interfacing card compatible with 8086 & 8051 kits         8.       Printer interfacing card compatible with 8086 & 8051 kits         8.       Serial and Parallel interfacing card compatible with 8086 & 8051 kits   |          | Laboratory                         |    |  |
| 22.       Networks Laboratory       2.       C / C++ / Java / Python / Equivalent Compiler Network Simulator like NS2 / Glomosim / OPNEt / Packet Tracer         1.       Microcontroller trainer kit       2.       Digital clock interfacing board compatible with 8086 & 8051 kits         23.       Microprocessor and Microcontroller Laboratory       1.       Microprocessor trainer kit with power supply         4.       Stepper motor control interfacing card compatible with 8086 & 8051 kits       5.       Traffic light control interfacing card compatible with 8086 & 8051 kits         6.       Keyboard & Display interface board compatible with 8086 & 8051 kits       7.       A/D and D/A interfacing card compatible with 8086 & 8051 kits         7.       A/D and D/A interfacing card compatible with 8086 & 8051 kits       9.       Serial and Parallel interfacing card compatible with 8086 & 8051 kits  |          |                                    |    | · · · ·  |
| 23.       Microprocessor and Microcontroller         Laboratory       2.         C/C++/Java/Python/Equivalent Compiler Network Simulator<br>like NS2/Glomosim / OPNEt / Packet Tracer         1.       Microcontroller trainer kit         2.       Digital clock interfacing board compatible with 8086 & 8051 kits         3.       8086 Microprocessor trainer kit with power supply         4.       Stepper motor control interfacing compatible with 8086 &<br>8051 kits         5.       Traffic light control interfacing card compatible with 8086 &<br>8051 kits         6.       Keyboard & Display interface board compatible with 8086 &<br>8051 kits         7.       A/D and D/A interfacing card compatible with 8086 & 8051 kits         8.       Printer interfacing card compatible with 8086 & 8051 kits         9.       Serial and Parallel interfacing card compatible with 8086 & 8051<br>kits   | 22.      | Networks Laboratory                |    |  |
| 23.       Microprocessor and Microcontroller         Laboratory       1.         Microprocessor and Microcontroller         Aboratory         Microprocessor and Microcontroller         Aboratory         Aboratory         Aboratory         Aboratory         Aboratory         Boratory         Aboratory         Aboratory         Boratory         Boratory <td></td> <td>INCLIMULIKS LAUULALULY</td> <td>2.</td> <td></td>   |          | INCLIMULIKS LAUULALULY             | 2. |  |
| <ul> <li>23. Microprocessor and Microcontroller Laboratory</li> <li>23. Microprocessor and Microcontroller Laboratory</li> <li>24. Digital clock interfacing board compatible with 8086 &amp; 8051 kits</li> <li>3. Big and big an</li></ul> |          |                                    | 1  |  |
| <ul> <li>23. Microprocessor and Microcontroller<br/>Laboratory</li> <li>3. 8086 Microprocessor trainer kit with power supply</li> <li>4. Stepper motor control interfacing compatible with 8086 &amp;<br/>8051 kits</li> <li>5. Traffic light control interfacing card compatible with 8086 &amp;<br/>8051 kits</li> <li>6. Keyboard &amp; Display interface board compatible with 8086 &amp;<br/>8051 kits</li> <li>7. A/D and D/A interfacing card compatible with 8086 &amp; 8051 kits</li> <li>8. Printer interfacing card compatible with 8086 &amp; 8051 kits</li> <li>9. Serial and Parallel interfacing card compatible with 8086 &amp; 8051 kits</li> </ul>   |          |                                    |    |  |
| <ul> <li>23. Microprocessor and Microcontroller<br/>Laboratory</li> <li>4. Stepper motor control interfacing compatible with 8086 &amp;<br/>8051 kits</li> <li>5. Traffic light control interfacing card compatible with 8086 &amp;<br/>8051 kits</li> <li>6. Keyboard &amp; Display interface board compatible with 8086 &amp;<br/>8051 kits</li> <li>7. A/D and D/A interfacing card compatible with 8086 &amp; 8051 kits</li> <li>8. Printer interfacing card compatible with 8086 &amp; 8051 kits</li> <li>9. Serial and Parallel interfacing card compatible with 8086 &amp; 8051<br/>kits</li> </ul>   |          |                                    |    |  |
| <ul> <li>23. Microprocessor and Microcontroller<br/>Laboratory</li> <li>3. Microprocessor and Microcontroller<br/>Laboratory</li> <li>5. Traffic light control interfacing card compatible with 8086 &amp;<br/>8051 kits</li> <li>6. Keyboard &amp; Display interface board compatible with 8086 &amp;<br/>8051 kits</li> <li>7. A/D and D/A interfacing card compatible with 8086 &amp; 8051 kits</li> <li>8. Printer interfacing card compatible with 8086 &amp; 8051 kits</li> <li>9. Serial and Parallel interfacing card compatible with 8086 &amp; 8051 kits</li> </ul>  |          |                                    |    |  |
| 23.       Microprocessor and Microcontroller Laboratory       5.       Traffic light control interfacing card compatible with 8086 & 8051 kits         6.       Keyboard & Display interface board compatible with 8086 & 8051 kits         7.       A/D and D/A interfacing card compatible with 8086 & 8051 kits         8.       Printer interfacing card compatible with 8086 & 8051 kits         9.       Serial and Parallel interfacing card compatible with 8086 & 8051 kits         9.       Serial and Parallel interfacing card compatible with 8086 & 8051 kits  |          |                                    | 4. |  |
| 2.3.       Interspectation of the control of the second of t                                       |          |                                    | 5  |  |
| Laboratory       6. Keyboard & Display interface board compatible with 8086 & 8051 kits         7. A/D and D/A interfacing card compatible with 8086 & 8051 kits         8. Printer interfacing card compatible with 8086 & 8051 kits         9. Serial and Parallel interfacing card compatible with 8086 & 8051 kits         9. Serial and Parallel interfacing card compatible with 8086 & 8051 kits  | 23.      | Microprocessor and Microcontroller | э. |  |
| 8051 kits<br>7. A/D and D/A interfacing card compatible with 8086 & 8051 kits<br>8. Printer interfacing card compatible with 8086 & 8051 kits<br>9. Serial and Parallel interfacing card compatible with 8086 & 8051<br>kits   |          | Laboratory                         | -  |  |
| 7.       A/D and D/A interfacing card compatible with 8086 & 8051 kits         8.       Printer interfacing card compatible with 8086 & 8051 kits         9.       Serial and Parallel interfacing card compatible with 8086 & 8051 kits         24       A/D  |          |                                    | 0. |  |
| 8. Printer interfacing card compatible with 8086 & 8051 kits<br>9. Serial and Parallel interfacing card compatible with 8086 & 8051 kits   |          |                                    | -  |  |
| 9. Serial and Parallel interfacing card compatible with 8086 & 8051<br>kits  |          |                                    |    |  |
| kits   |          |                                    |    | Finner interfacing card compatible with 8086 & 8051 Kits |
| 24   |          |                                    | 9. |  |
| 24.         Operating Systems Laboratory         1.         Systems with Linux OS and GNU Computer   |          |                                    | 1  | KIIS   |
| Presente Systems Encountry   | • •      |                                    |    |  |
|  | 24.      | Operating Systems Laboratory       | 1  | Systems with Linux OS and GNU Computer                   |

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|--------------------|--|---------|---|
| 25.                | Object Oriented Analysis and Design          | 1.      | Open Source Alternatives: ArgoUML, StarUML, Visual Paradigm     |
| 25.                | • • •  | 2.      | (or) Equivalent Eclipse IDE and Junit<br>PCs                    |
|                    | Laboratory                                   | 3.      | Rational Suite  |
|                    |  | 1.      | Systems   |
| 26.                | Laterna et Due e ne ne se in el Laborat e me | 2.      | Server (Web Server)   |
|                    | Internet Programming Laboratory              | 3.      | Java/JSP/ISP Webserver/Apache Tomcat / MySQL /                  |
|                    |  |         | Dreamweaver or Equivalent, WAMP/XAMP                            |
| 27.                | Mobile Application Development               |         | •   |
| 27.                |  | 1.      | Standalone desktops or Server supporting terminals              |
|                    | Laboratory                                   |         |   |
|                    |  | 1.      | Bread Boards  |
|                    |  | 2.      | CRO(30MHz)  |
| • •                |  | 3.      | Dual Regulated power Supplies(0-30V)                            |
| 28.                | Circuits and Devices Laboratory              | 4.      | Function Generators(3MHz)                                       |
|                    | Circuits and Devices Europiatory             | 5.      | IN4007,Zener diodes   |
|                    |  | 6.      | Resistors, Capacitors, Inductors                                |
|                    |  | 7.      | Mixed Signal Oscilloscope (100MHz)                              |
|                    |  | 8.      | BC107,BC148,2N2646,BFW10  |
|                    |  | 1.      | Dual Regulated Power Supplies (0 - 30V)                         |
|                    |  | 2.      | Dual power supply/single mode power supply                      |
|                    |  | 3.      | Diodes, Zener diode   |
|                    |  | 4.      | Bread Boards  |
|                    |  | 5.      | CRO (30MHz)   |
|                    |  | 6.<br>7 | Transistor/FET (BJT-NPN-PNP and NMOS/PMOS)                      |
| 29.                | Analog and Digital Circuits                  | 7.      | Standalone desktop PCs with SPICE software                      |
| 29.                |  | 8.      | Signal Generator /Function Generators (3 MHz)                   |
|                    | Laboratory                                   | 9.      | Seven segment display   |
|                    |  |         | Resistors, Capacitors, Inductors<br>Multimeter                  |
|                    |  |         | IC Trainer Kit  |
|                    |  |         | ICs 7400/ 7402 / 7404 / 7486 / 7408 / 7432 / 7483 / 74150 /     |
|                    |  | 15.     | 74151 / 74147 / 7445 / 7476/7491/ 555 / 7494 / 7447 / 74180 /   |
|                    |  |         | 7485 / 7473 / 74138 / 7411 /7474                                |
|                    |  | 14      | Computer with HDL software                                      |
|                    |  | 14.     | Transistors, Resistors, Capacitors, Inductors, diodes, Zener    |
|                    |  | 1.      | Diodes, Bread   |
|                    |  | 2.      | Boards, Transformers  |
|                    |  | 3.      | CRO (Min 30MHz  |
|                    |  | 4.      | Digital LCR Meter   |
| 20                 | Circuits Design and Simulation               | 5.      | Digital Multimeter  |
| 30.                | -  | 6.      | Dual Regulated Power Supplies (0 - 30V)                         |
|                    | Laboratory                                   | 7.      | Signal Generator /Function Generators (2 MHz)                   |
|                    |  | 8.      | SPICE Circuit Simulation Software                               |
|                    |  | 9.      | Transistor/FET (BJT-NPN-PNP and NMOS/PMOS)                      |
|                    |  | 10.     | Transistors, Resistors, Capacitors, diodes, Zener diodes, Bread |
|                    |  |         | Boards, Transformers, wires, Power transistors, Potentiometer,  |
|                    |  |         | A/D and D/A convertors, LEDs                                    |
| T                  |  | 1.      | Digital Multimeter  |
|                    | Linear Integrated Circuits                   | 2.      | Dual Regulated Power Supplies (0 - 30V)                         |
| 31.                | Linear Integrated Circuits                   | 3.      | IC  |
|                    | Laboratory                                   | 4.      | Signal Generator /Function Generators (2 MHz)                   |
|                    | -  | 5.      | Standalone desktops PC  |
|                    |  | 6.      | CRO/DSO (Min 30MHz)   |
|                    |  | 1.      | CRO (20MHz)   |
|                    |  | 2.      | MATLAB with Simulink and Signal Processing Tool Box or          |
| 32.                | Digital Signal Processing                    | ~       | Equivalent Software in desktop systems                          |
|                    | Laboratory                                   | 3.      | PCs with Fixed / Floating point DSP Processors (Kit / Add-on    |
|                    | Lucorulory                                   | 4       | Cards)  |
|                    |  | 4.      | Signal Generators (1MHz)  |
|                    |  | 5.      | Analog Discovery kit(signal Generator + CRO together)           |
|                    |  | 1.      | Probes(CRO)   |
|                    |  | 2.      | CROs  |
| 33.                | Communication Systems                        | 3.      | DSO   |
| <i><b>SS</b></i> . | •  | 4.      | Kits for Signal Sampling, TDM, AM, FM, PCM, DM and Line         |
|                    | Laboratory                                   | ~       | Coding Schemes,   |
|                    |  | 5.      | Error control code  |
|                    |  | 6.      | MATLAB/SCILAB or equivalent software package for                |
|                    |  |         | simulation experiments  |

|     |                                      | 7. MSO<br>8. Patch cords   |
|-----|--------------------------------------|--|
| 34. | Communication Networks<br>Laboratory | 9. PCs         1. PCs         2. Qualnet /Optisim /Matlab /NS2/ Netsim   |
| 35. | VLSI Design Laboratory               | <ol> <li>Xilinx ISE/Altera Quartus/ equivalent EDA Tools</li> <li>Cadence/Synopsis/ Mentor Graphics/ Tanner/ equivalent EDA<br/>Tools</li> <li>Personal Computer</li> </ol>  |
|     |                                      | <ol> <li>Xilinx/Altera/equivalent FPGA Boards</li> <li>PiN PDs with ST / SC / E2000 receptacles 650 / 850 nm</li> <li>Kit for measuring Numerical aperture and Attenuation of</li> <li>LEDs with ST / SC / E2000 receptacles 650 / 850 nm</li> <li>Microwave test Bench at X band and Antenna turn table to<br/>measure Radiation pattern of Horn antenna, 2 Horn antennas</li> <li>Microwave test Bench at X band to determine Directional coupler<br/>characteristics</li> <li>Microwave test Bench at X band to determine VSWR for Isolator<br/>and</li> <li>Circulator, VSWR meter, Isolator, Circulator, E Plane Tee, H</li> </ol>                    |
| 36. | Optical and Microwave<br>Laboratory  | <ul> <li>plane Tee</li> <li>8. Microwave test Bench at X band, Variable attenuator, Detector<br/>and 20 MHz</li> <li>9. Digital / Analog Oscilloscope</li> <li>10. MM/SM Glass and plastic fiber patch chords with ST/SC/E2000<br/>connectors</li> <li>11. Trainer kit for analyzing Analog and Digital link performance, 2<br/>Mbps PRBS Data source, 10 MHz signal generator, 20 MHz<br/>Digital storage Oscilloscope</li> <li>12. Trainer kit for carrying out LED and PIN diode characteristics,<br/>Digital multimeter, optical power meter</li> <li>13. Trainer kit for determining the mode characteristics, losses in<br/>optical fiber</li> </ul> |
| 37. | Electric Circuits Laboratory         | <ol> <li>Function Generator (1 MHz)</li> <li>Single Phase Energy Meter</li> <li>Multi-meters</li> <li>PC With Circuit Simulation Software (10 Users</li> <li>Regulated Power Supply: 0 - 15 V D.C</li> <li>Single Phase Wattmeter</li> <li>AC/DC - Voltmeters</li> <li>Printer</li> <li>Oscilloscope (20 MHz).</li> <li>Ammeters</li> <li>Circuit Connection Boards</li> <li>Decade Resistance Box, Decade Inductance Box, Decade Capacitance Box (Each)</li> <li>Digital Storage Oscilloscope (20 MHz)</li> <li>e-Sim/Scilab/Pspice / Matlab /other Equivalent software Package)</li> </ol>   |
| 38. | Electronics Laboratory               | <ol> <li>Resistors, Capacitors and inductors</li> <li>Necessary digital IC</li> <li>Function Generators</li> <li>CRO</li> <li>Bread boards</li> <li>Regulated 3 output Power Supply 5 +_ 15V</li> <li>Storage Oscilloscope</li> <li>Semiconductor devices like Diode, Zener Diode, NPN<br/>Transistors, JFET, UJT, Photo diode, Photo Transistor</li> </ol>  |
| 39. | Electrical Machines Laboratory I     | <ol> <li>Three Phase Resistive Loading Bank</li> <li>Single Phase Transformer</li> <li>Single Phase Resistive Loading Bank</li> <li>I Three Phase Induction Motor with Loading Arrangement</li> <li>Single Phase Induction Motor with Loading Arrangement</li> <li>Single Phase Auto Transformer</li> <li>DC Shunt Motor Coupled With Three phase Alternator</li> <li>DC Shunt Motor Coupled With DC Shunt Generator</li> <li>DC Series Motor with Loading Arrangement</li> <li>DC Compound motor with loading arrangement</li> <li>Three Phase Auto Transformer</li> </ol>  |

| 40.       Control and Instrumentation         41.       Control and Instrumentation         42.       Power Electronics and Drives Laboratory III         43.       Prover Electronics and Drives Laboratory III         44.       Power Electronics and Drives Laboratory III         45.       Power Electronics and Drives Laboratory III         46.       Power Electronics and Drives Laboratory III         47.       Power Electronics and Drives Laboratory III         41.       Electric house I Transformed Transforme  |          |                                   | 10  | Tachemeter Digital/Angles            |
|---|----------|-----------------------------------|-----|--------------------------------------|
| 40.         14. DC Shath Motor Coupled With DC Compound Generator           14. DC Shath Motor Coupled With DC Compound Generator         1. ODDital sensor           21. IAUT210mm core length movable type         1. IAUT210mm core length movable type           31. Instrumentian Amplifier kit         11. Corransistor kit           40.         Control and Instrumentian Amplifier kit         11. Corransistor kit           41.         Control and Instrumentation         11. CR0 30MHz           42.         Control (and Instrumentation)         11. CR0 30MHz         2. Analog. Digital and Digital - Analog converters (APC and DACs)           13. Laboratory         11. CR0 30MHz         2. Analog. Digital and Digital - Analog converters (APC and DACs)           14. The concern Generator (Complex ext)         2. Analog. Digital and Digital - Analog converters (APC and DACs)           14. The concern Generator (Complex ext)         2. Malog Digital and Digital - Analog converters (APC and DACs)           15. 30 pair presume chamber (complex ext)         2. Malog Digital and Digital - Analog converters (APC and DACs)           16. 20 ML Function Generator         2. Malog Digital and Digital - Analog converters (APC and DACs)           17. 100em weights         2. Analog Digital and Digital - Analog converters (APC and DACs)           18. At frong tame to remark with anot y term bank         2. Ref. (Control Generator           19. Distacontand transition move thas a term ba  |          |                                   |     |                                      |
| 40. <ul> <li>Optical sensor</li> <li>L. VDT20mm core length movable type</li> <li>Instrumentation Amplifier kit</li> <li>I. Canasistor kit</li> <li>Flow measurement Trainer kit (12 HP Motor, Water tank, Digital Millianmeler, complete set)</li> <li>Electric lender</li> <li>DSO for capting transience</li> <li>Carneti generator (0, 20mA)</li> <li>CRO 30MHZ</li> <li>Analog conveners (ADC and DACs)</li> <li>At ford pump (with necessary connecting tube)</li> <li>A CS synchic transmitter Receiver</li> <li>Static function (0, 20mA)</li> <li>CRO 30MHZ</li> <li>At ford pump (with necessary connecting tube)</li> <li>A CS synchic transmitter Receiver</li> <li>Static function (0, 20mA)</li> <li>CRO 30MHZ</li> <li>Analog conveners (ADC and DACs)</li> <li>Atta ford incore synchronic multicity and previous (10 ACS)</li> <li>Atta ford incore synchronic multicity and previous (10 ACS)</li> <li>Atta ford incore (20mp field)</li> <li>Control and Instrumentation</li> <li>Static function Motor with Canding Arrangement Static (with manual)</li> <li>Prosein Control System Kit (with manual)</li> <li>Provenal computers with control system simulation packages</li> <li>DC Shurt Motor Capifield with Three phase Alternator (10, Capacito Bank)</li> <li>Synchrunsus Induction Motor w</li></ul>   |          |                                   |     |                                      |
| 40.       Control and Instrumentation Amplific Ki         41.       Control and Instrumentation         42.       Control and Instrumentation         43.       Control and Instrumentation         44.       Control and Instrumentation         45.       Electric heater         46.       Control and Instrumentation         47.       Control and Instrumentation         48.       Control and Instrumentation         49.       Control and Instrumentation         40.       Control and Instrumentation         41.       Electric heater         42.       Power Electrical Machines Laboratory II         43.       Electrical Machines Laboratory III         44.       Electrical Machines Laboratory III         44.       Electrical Machines Laboratory III         45.       Power Electronics and         46.       Drives Laboratory III         47.       Power Electronics and         48.       Drives Laboratory III         49.       Power Electronics and         40.       Drives Laboratory III         41.       Electrical Machines Laboratory III         42.       Power Electronics and         43.       Drives Laboratory IIII         44.  |          |                                   |     | * *                                  |
| <ul> <li>40. Control and Instrumentation</li> <li>41. Control and Instrumentation</li> <li>42. Power Electronics and Drives Laboratory II</li> <li>43. Electrical Machines Laboratory II</li> <li>44. Server Desire Complex Set Control Systems Kin Unit Immered Systems Kin Unit Im</li></ul>                    |          |                                   |     |                                      |
| 4.       I. II. "Transistor kit         4.       I. "Invasistor kit         5.       Flow measurement Traine kit (1/2 IP Motor, Water tank, Digital Milliammeter, complete set)         6.       Digital milliammeter, complete set)         6.       Digital milliammeter, spead and torque sensors         9.       Digital milliammeters, spead and torque sensors         9.       Digital milliammeters, spead and torque sensors         9.       Control and Instrumentation         11.       Air foot pump (with necessary connecting tubes)         12.       Air foot pump (with necessary connecting tubes)         13.       Storig personation (Contramenter Trains Kither Contramenter Trains Kither Trainstor (silicon type) RTD nickel type Thermometer         13.       Single phase Auto transformer         14.       Electrical Machines Laboratory II       Or Shart More Couplet with control system simulation packages         21.       Procend computers with count system simulation packages       There Phase Resistive Loading Rangement         22.       Power Electronics and       Difference       Single Phase Auto Transformer         23.       Single Phase Auto Transformer       Single Phase Auto Transformer         34.       Single Phase Auto Transformer       Single Phase Auto Transformer         25.       Strach Generator       Single Phase   |          |                                   |     |                                      |
| 40.       Control and Instrumentation       5.       Flow measurement Trainer kit (1/2 HP Moor, Water tank, Digital Milliameter, complete set)         41.       Control and Instrumentation       6.       Electric heater         7.       DSR for capating transience       8.       Digital multi meters, speed and torque sensors         9.       DC motor - Chercatar test set-up for evaluation of motor parameters.       0.       Control and Instrumentation         1.       Laboratory       Anito Company (with necessary connecting tabes)       1.         1.       As for pamp (with necessary connecting tabes)       1.       1.         1.       As for pamp (with necessary connecting tabes)       1.       1.         1.       Description and Digital - Analog converters (ADC and DACs)       1.       1.         2.       Anito Company (with necessary connecting tabes)       1.       1.       1.         2.       Anito Company (with necessary connecting tabes)       1.       1.       1.         3.       Single phase Auto transformer       2.       2.       1.       1.       1.         41.       Electrical Machines Laboratory II       1.       2.       1.       1.       1.       1.         42.       Procend compaters with outon system simulan nactages       1.  |          |                                   |     |                                      |
| 40.       Control and Instrumentation       6. Electric heater         40.       Control and Instrumentation       8. Digital multi inters, speed and torque sensors         41.       Control and Instrumentation       1. CR0 30ML         42.       Power Electronics and Digital Analog       Digital and Digital Analog         43.       February State Stat  |          |                                   |     |                                      |
| 40.       Control and Instrumentation         41.       Control and Instrumentation         42.       Control and Instrumentation         43.       Control and Instrumentation         44.       Control and Instrumentation         45.       Control and Instrumentation         46.       Control and Instrumentation         47.       Control and Instrumentation         48.       Control and Instrumentation         49.       Control and Instrumentation         40.       Control and Instrumentation         41.       Electrical Machines Laboratory         42.       Power Electronics and Division Control System Statistics and Control Control System Statistics and Contro  |          |                                   | 5.  |                                      |
| 40.       Control and Instrumentation         41.       Control and Instrumentation         42.       Control and Instrumentation         43.       Control and Instrumentation         44.       Control and Instrumentation         45.       Control and Digital - Analog converters (ADC and DACs)         16.       Current generator (0, 20mA)         17.       Digital manufactor transitions receiver         18.       Ar Too pump (with necessary connecting thes)         14.       A. C.Synchro transitions receiver         15.       Digital match receiver         16.       CMF4 Punction Generator         17.       IOMgm weights         18.       Thermistor transitomer         20.       Voltater Receiver         21.       Voltater Receiver         22.       Voltater Receiver         24.       Proved and Counce Systems Kit (with manual)         25.       Presonal computers with council system Site (with manual)         26.       Proved and Counce Systems Kit (with manual)         27.       Presonal computers with councel system Site (with manual)         28.       Proved and counce Resider Loadon Moor with Loading Arrangement         37.       Three These Auto Transformer         38.       S   |          |                                   | 6   |                                      |
| 40.       Control and Instrumentation         41.       Control and Instrumentation         42.       Power Electronics and Digital Control System Simulation packages         41.       Electrical Machines Laboratory II         42.       Power Electronics and Digital Control System Simulation and Control System Simulation and Single Phase Singl  |          |                                   |     |                                      |
| 40.       Control and Instrumentation       9. DC motor - Generator iest set-up for evaluation of motor parameters         10.       Current generator (0. 20mA)       1. CRO 30MHz         11.       Laboratory       13. Air foot pump (with accessary connecting tubes)         14.       14. AC Synchro transmitter Acceiver         15.       30 psi Pressure chamber (complete set)         16.       2MHz Function Generator         17.       100gm weights         18.       Thermistor (silicon type) RTD nickel type Thermometer         19.       Strain Gange Kit with Handy lever beam         21.       Vollmeet Rhostal Stop watch Connecting wires         23.       Tacho Generator Coupling set         24.       R. L. C Bridge kit (with hannal)         25.       Synchronous Induction motor with Loading Arrangement         30.       Single Phase Auto transformer         21.       DC Shurt Notor Coupled With Three phase Slip ring Induction motor         22.       Single Phase Induction Motor with Loading Arrangement         31.       Three Phase Induction Motor with Loading Arrangement         32.       Single Phase Auto Transformer         33.       Single Phase Auto Transformer         34.       C Brank Coupled With Three phase Alternator         10.       Capacitor Baak  |          |                                   |     |                                      |
| 40.       Control and Instrumentation <ul> <li>Current generator (0-20mA)</li> <li>Ar for to pump (with necessary connecting tubes)</li> <li>Ar Co yuch to transitient receiver</li> <li>Star for the pump (with necessary connecting tubes)</li> <li>Ar Complete set)</li> <li>Mark Function Generator</li> <li>Star for the pump (with necessary connecting wires)</li> <li>Ar for the pump (with necessary connecting wires)</li> <li>Star for the pump (with necessary connecting wires)</li> <li>Current generator (0-20mH)</li> <li>Voltimeter Recoss Stop work) Connecting wires</li> <li>Tacho Generator Coupled with Three phase Silpring Induction motor</li> <li>Single Phase Induction Motor with Loading Arrangement</li> <li>Single Phase Induction Motor with Loading Arrangement</li> <li>Three Phase Induction Motor with Loading Arrangement</li> <li>Three Phase Induction Motor with Loading Arrangement</li> <li>Single Phase Induction Motor with Coading Arrangement</li> <li>Three Phase Induction Motor With Three phase Alternator</li> <li>Cupscing Phase</li> <li>Single Phase Induction Motor With Three phase Alternator</li> <li>Cupscing Phase</li> <li>Single Phase Alter Insthere Phase Restive Load</li></ul>  |          |                                   |     |                                      |
| 40.       Control and Instrumentation       10. Current generator (0-20mA)         1. CR0 30MHz       12. Anolog - Digital and Digital - Anolog converters (ADC and DACS)         13. Air foot pamp (with accessary connecting tubes)       13. Air foot pamp (with accessary connecting tubes)         14. CSynchron transmitter& receiver       15. 30 psi Pressure chamber (complete set)         15. 2014       CSynchron transmitter& receiver         16. 2014       CMC Synchron transmitter& receiver         17. 100gm weights       Thermistor Gillicon type) RTD nickel type Thermometer         18. Thermistor Gillicon type) RTD nickel type Thermometer       10. Single phase Anto transformer         20. Voltmeter Receiver       20. Single Phase Nath Connecting wires         21. Techo Generator Coupling set       21. Note Coupled State Anor transmitter Air 20. Personal computers with control system simulation packages         21. Voltmeter Receiver       10. Single Phase Induction Motor with Loading Arrangement         32. Single Phase Induction Motor with Loading Arrangement       21. Single Phase Resistive Loading Bank         41.       Electrical Machines Laboratory II       11. There Phase Resistive Loading Arrangement         33. Single Phase Induction Motor with Loading Arrangement       11. Single Phase Auto Transformer         41.       Electrical Machines and       11. Single Phase Auto Transformer         42.       Power Electronics and  |          |                                   | 9.  | -                                    |
| 40.       Control and Instrumentation         11.       CR0 30MHz         12.       Analog - Digital and Digital - Analog converters (ADC and DACs)         13.       Dif foot pump (with necessary connecting tubes)         14.       AC Synchro transmitter& receiver         15.       Dif foot pump (with necessary connecting tubes)         16.       2MHz Function Generator         17.00gm weights       18.         18.       Thermistor (silicon type) RTD nicket type Thermometer         19.       Strain Gauge Kit with Handy lever beam         20.       Strain Gauge Kit with Handy lever beam         21.       AG Generator Compling set         22.       Voltmeter Rheostat Stop wate/ Commonling wires         23.       Tacho Generator Compling set         24.       R, L, C Bridge Kit (with manual)         25.       Single Phase Relation Motor with Loading Arrangement         3.       Single Phase Relation Motor with Loading Arrangement         3.       Single Phase Relation Motor with Loading Arrangement         41.       Electrical Machines Laboratory II       Single Phase Relation Motor with Loading Arrangement         41.       Electrical Machines Laboratory II       Single Phase Relation Housing Arrangement         42.       Power Electronics and       Single Phas   |          |                                   | 10  |                                      |
| 40.       Control and Instrumentation<br>Laboratory       12. Analog - Digital and Digital - Analog converters (ADC and<br>DACO)         13. Air foot pump (with necessary connecting tubes)       14. AC Synchron transiturer Arceiver         15. 30 psi Pressure chamber (complete set)       16. 2MLF Function Generator         16. 2MLF Function Generator       10. 2MLF Function Generator         17. 100gm weights       18. Thermistor (silicon type) RTD nickel type Thermometer         28. Strain Gauge Kit with Handy lever beam       12. Wathour meter (energy meter)         21. Wathour meter (energy meter)       22. Volumeter Rheostal Stop watch Connecting wites         23. Tacho Generator Conpling set       24. R. L. C Bridge kit (with manual)         26. Benerator Conpling set       24. R. L. C Bridge kit (with manual)         27. Personal conputers with control system situlation packages       1. DC Shurt Motor Coupled With Three phase Ship ring Induction<br>motor         28. Single Phase Roticity to Loading Arrangement       3. Single Phase Roticity to Loading Arrangement         38. Single Phase Autor Transformer       5. Synchronous Induction motor 3HP         6       Tachometer -Digital/Analog       7. Three Phase Roticity to Loading Arrangement         8. Single Phase Autor Transformer       1. Single Phase Autor Transformer         4. Drives Laboratory       1. Single Phase Autor Transformer         8. Single Phase Autor Transformer       1. Sin  |          |                                   |     |                                      |
| 40.       Control and Instrumentation       DACs)         Laboratory       13. Air foot pump (with necessary connecting tubes)         14. A C Synchro transmitter& receiver       30. pis Prosavor chamber (complex set)         16.       2MH2 Function Generator         17.00gm weights       18. Thermistor (silicon type) RTD nickel type Thermometer         18. Thermistor (silicon type) RTD nickel type Thermometer       20. Strain Gauge Kit with Handy lever beam         20.       Strain Gauge Kit with Handy lever beam       20. Strain Gauge Kit with manual)         21.       Wathour meter (energy meter)       22. Volumeter Rheostat Stop watch Commonling set         23.       Cohone Gonerator Coupling set       24. R. L. C Bridge kit (with manual)         26.       PD controller simulation and learner kit       27. Personal computers with control system simulation packages         24.       R. L. C Bridge Kit (with Manual)       26. PID controller simulation motor SHP         37.       Single Phase Relative Loading Bank       3.         41.       Electrical Machines Laboratory II       5.         42.       Power Electronics and       1.       DC Shuri Motor Coupled With Three phase Alternator         38.       Single Phase Residue Loading Bank       1.       Single Phase Residue Loading Bank         42.       Power Electronics and       1.  |          |                                   |     |                                      |
| 41.       Laboratory       13. Air foor pump (with necessary connecting tubes)         14. AC Synchro transmitter& receiver       13. 30 psi Pressure chamber (complete set)         15. 30 psi Pressure chamber (complete set)       16. 2MHz Function Generator         17. 100gm weights       18. Thermistor (silicon type) RTD nickel type Thermometer         9. Single phase Auto transformer       20. Mtrain Gauge Kit with Handy lever beam         11.       Wathour meter (energy meter)         22. Voltmeter Rhevisat Stop watch Connecting wires         23. Tacho Generator Coupling set         24. R. L. C Bridge kit (with manual)         25. Position Control System Simulation packages         26. PID controller simulation and learner kit         27. Personal computers with control system simulation packages         28. Single Phase Relative Loading Bank         49. C Shurt Moor Coupled With Three phase Aller mator         29. Single Phase Relative Loading Bank         40. C Spacinor Bank         41. Electrical Machines Laboratory II         42.         43. Reserve Phase Auto Transformer         5. Single Phase Auto Transformer         6. Single Phase Auto Transformer         7. Three Phase Auto Transformer         8. Single Phase Auto Transformer         8. Single Phase Auto Transformer         9. DC Shurt Moor Cou  | 40       | Control and Instrumentation       | 12. |                                      |
| 41.       AC Synchro transmittee& receiver         15.30 pp. Pressure chamber (complete set)         16.20H1/2 Function Generator         17.100m weights         18. Thermistor (silicon type) RTD nickl type Thermometer         19. Single phase Auto transformer         20. Strain Gauge Kit with Handy lever beam         21. Voltmeter Rheostar Stop watch Connecting wires         22. Voltmeter Rheostar Stop watch Connecting wires         23. Tacho Generator Coupling set         24. R. L. C. Brdige Kit (with manual)         25. Position Control Systems Kit (with manual)         26. Postion Control Systems Kit (with manual)         27. Personal computers with control system simulation packages         28. Ingle Phase Resistive Loading Bank         40. CShum Motor Coupled With Three phase Slip ring Induction motor         30. CS Shum Motor Coupled With Three phase Alternator         31. DC Shum Motor Coupled With Three phase Alternator         32. Single Phase Auto Transformer         33. Single Phase Auto Transformer         34. Single Phase Auto Transformer         35. Single Phase Auto Transformer         35. Single Phase Auto Transformer         35. Single Phase Auto Transformer         36. Single phase State Shat Hit Controller along with lamp or the costal load         26. Single phase StAt Based half controllet converter and fully con  | 40.      |                                   | 12  | ,                                    |
| 41.       15. 30 psi Pressure chamber (complete set)         16. 2MHZ Function Generator         17.       100gm weights         18.       Thermistor (silicon type) RTD nickel type Thermometer         19.       Single phase Auto transformer         20.       Strain Gauge Kii with Handy lever beam         21.       Wathour meter (energy meter)         22.       Voltmeter Rhoostat Stop watch Connecting wires         23.       Tacho Generator Coupling set         24.       R. L. C Bridge kii (with manual)         25.       Postmon alcomputers with control systems simulation packages         10.       DC Shant Motor Coupled With Three phase Slip ring Induction more         2.       Single Phase Resistive Loading Bank         4.       Three Phase Auto Transformer         5.       Synchronous Induction Motor with Loading Arrangement         8.       Three Phase Auto Transformer         9.       DC Shurt Motor Coupled With Three phase Alternator         10.       Capacitor Bank         9.       DC Shurt Motor Coupled With Three phase Alternator         10.       Capacitor Bank         9.       DC Shurt Motor Coupled With Three phase Alternator         10.       Capacitor Bank         9.       DC Shurt Motor Coupled With Three phase  |          | Laboratory                        |     |                                      |
| 41.       16. 2MHz Function Generator         17. 100gm weights       18. Thermistor (silicon type) RTD nickel type Thermometer         19. Single phase Auto transformer       20. Strain Gauge Ku with Handy lever beam         21. Withour meter (energy meter)       22. Voltimeter Rheostal Stop watch Connecting wires         23. Tacho Generator Coupling set       24. R. L. C. Bridgs Ki (with manual)         24. R. L. C. Bridgs Ki (with manual)       25. Position Control Systems Ki (with manual)         25. Position Control Systems Ki (with manual)       26. Dorntol Systems Ki (with manual)         26. Physical State St  |          |                                   |     |                                      |
| 41.       Electrical Machines Laboratory II       17. 100gm verights         41.       Electrical Machines Laboratory II       18. There Phase Auto transformer         20.       Single phase Auto transformer         21.       Voltmeter Rheostat Stop watch Connecting wires         22.       Voltmeter Rheostat Stop watch Connecting wires         23.       Tacho Generator Coupling set         24.       R. L. C Bridge kit (with manual)         25.       Position Control Systems Sit (with manual)         26.       PD controller simulation and learner kit         27.       Personal computers with control system simulation packages         28.       ID C Shunt Moor Coupled With Three phase Slip ring Induction motor         2.       Single Phase Induction Moor 3BP         3.       Single Phase Auto Transformer         3.       Single phase Auto Transformer         4.       Three Phase Naturtion with Loading Arrangement         8.       Three Phase Naturition with Loading Arrangement         8.       Single phase Auto Transformer         1.       SCR ATRIAC hased 1 phase Act controller along with lamp or theostif load         1.       Single phase Auto Transformer         2.       Power Electronics and Drives Laboratory       1.         3.       Single phase Auto Tran   |          |                                   |     |                                      |
| 41.       Electrical Machines Laboratory II       18. Thermistor (silicon type) Rtvi with Handy lever beam         41.       Electrical Machines Laboratory II       20. Strain Gauge Kit with Handy lever beam         41.       Electrical Machines Laboratory II       21. Volumeter Ricosotal Stop watch Connecting wires         23.       Tacho Generator Coupling set         24.       R. L. C Bridge kit (with manual)         25.       Position Courled Systems Kit (with manual)         26.       DC Shunt Motor Coupled With Three phase Slip ring Induction motor         7.       Personal computers with courled system simulation packages         7.       DC Shunt Motor Coupled With Three phase Slip ring Induction motor         8.       Single Phase Resistive Loading Bank         4.       Three Phase Induction Motor with Loading Arrangement         8.       Single Phase Resistive Loading Bank         9.       DC Shunt Motor Coupled With Three phase Alternator         10.       Capacitor Bank         11.       Single Phase Resistive Loading Bank         9.       DC Shunt Motor Coupled With Three phase Alternator         10.       Capacitor Bank         11.       Single Phase Auto Transformer         12.       Single phase Auto Transformer         13.       Single Phase Auto Transformer   |          |                                   |     |                                      |
| 41.       Electrical Machines Laboratory II       19. Single phase Auto transformer         41.       Electrical Machines Laboratory II       20. Strain Gauge Kit (with manual)         22.       Volumeter Rucostat Stop watch Connecting wires         23.       Tacho Generator Systems Kit (with manual)         26.       Prosition Control Systems Sit (with manual)         27.       Personal computers with control system simulation packages         28.       DC Shunt Motor Coupled With Three phase Slip ring Induction motor         29.       Single Phase Induction Motor with Loading Arrangement         3.       Single Phase Induction Motor with Loading Arrangement         3.       Single Phase Induction Motor With Loading Arrangement         4.       Three Phase Auto Transformer         5.       Synchronous Induction motor 3HP         6.       Tachometer - Digital/Analog         7.       Three Phase Auto Transformer         8.       Diffice Bank         9.       DC Shunt Motor Coupled With Three phase Alternator         10.       Capacitor Bank         11.       Single phase Auto Transformer         8.       Single phase Auto transformer         9.       DC Shunt Motor Coupled With Three phase Alternator         10.       Capactor Bank         11.  |          |                                   |     |                                      |
| 41.       20. Strain Gauge Ki with Handy lever beam         1. Wathour meter (energy meter)       2. Voltmeter Rhoostat Stop watch Connecting wires         2.3. Tacho Generator Cooping set       2.4. R. L. C. Bridge kit (with manual)         25. Position Control Systems Kit (with manual)       2.6. PID controller simulation and learner kit         26. PID controller simulation and learner kit       2.7. Personal computers with control system simulation packages         26. PID controller simulation motor       2.5. Single Phase Induction Motor with Loading Arrangement         3. Single Phase Induction Motor with Loading Arrangement       3. Single Phase Induction Motor with Loading Arrangement         3. Single Phase Induction Motor with Loading Arrangement       3. Single Phase Induction Motor With Coading Arrangement         3. Single Phase Induction Motor With Loading Arrangement       3. Single Phase Resistive Loading Bank         4. Three Phase Induction Motor With Coading Arrangement       8. Three Phase Induction Motor With Coading Arrangement         8. Three Phase Induction Motor With Coading Arrangement       8. Three Phase Induction Motor With Three phase Alternator         10. Capacitor Bank       11. SCR & TRIAC based 1 phase Act controller along with lamp or rheostat load         11. SCR & TRIAC based 1 phase Act controller along with lamp or rheostat load       13. Single phase SCR based half controlled converter and fully controlled converter along with builtin. //scarate/firing circui/motule and meter         4. Switc  |          |                                   |     |                                      |
| 41.       21. Wathour meter (energy meter)         22. Voltmeter Resotat Sop watch Connecting wires         23. Tacho Generator Coupling set         24. R, L, C Bridge kit (with manual)         25. Position Control Systems Kit (with manual)         26. PUD controller simulation and learner kit         27. Personal computers with control system simulation packages         1.       DC Shunt Motor Coupled With Three phase Slip ring Induction motor         21.       Single Phase Induction Motor with Loading Arrangement         3.       Single Phase Resistive Loading Bank         41.       Electrical Machines Laboratory II         41.       Electrical Machines Laboratory II         41.       DC Shunt Motor Coupled With Three phase Alternator         3.       Single Phase Resistive Loading Bank         4.       Three Phase Resistive Loading Bank         9.       DC Shunt Motor Coupled With Three phase Alternator         10.       Capacitor Bank         11.       Single phase Auto Transformer         12.       Single phase Auto Transformer         13.       Single phase SCR based half controlled converter and fully controlled converter module/Discrete Component         5.       Switched mode power converter module/Discrete Component         5.       Work tables         6. <t< td=""><td></td><td></td><td></td><td></td></t<>   |          |                                   |     |                                      |
| 41.       22. Voltmeter Rheostat Sirop wach Connecting wires         23. Tacho Generator Coupling set:       24. R, L, C Bridge kit (with manual)         25. Position Control Systems Kit (with manual)       26. PID controller simulation and learner kit         27.       Personal computers with control system simulation packages         28.       DC Shunt Motor Coupled With Three phase Slip ring Induction motor         29.       Single Phase Induction Motor with Loading Arrangement         30.       Single Phase Rotexistive Loading Bank         41.       Electrical Machines Laboratory II         42.       Electrical Machines Laboratory II         41.       Electrical Machines Laboratory II         42.       Number Single Phase Rotexistive Loading Bank         43.       Three Phase Resistive Loading Bank         44.       Three Phase Rotexistive Loading Bank         50.       CShunt Motor Coupled With Three phase Alternator         10.       Capacitor Bank         11.       Single Phase Auto Transformer         22.       Single Phase SCR based I phase AC controller along with lamp or rheostat load         2.       Single phase SCR based Paif controlled converter and fully controlled ronverter along with built-in/separate/firing circui/module and meter         3.       Single phase SCR based Paif controlled convertere i of required ranges   |          |                                   |     |                                      |
| 41.       23. Tacho Generator Coupling set         24. R. L. C Bridge kit (with manual)       25. Position Control Systems Kit (with manual)         25. Position Control Systems Kit (with manual)       26. PID controller simulation and learner kit         27. Personal compaters with control System simulation packages       1. DC Shunt Motor Coupled With Three phase Slip ring Induction motor         28. Single Phase Induction Motor with Loading Arrangement       3. Single Phase Resistive Loading Bank         4. Three Phase Auto Transformer       5. Synchronous Induction motor 3HP         6. Tachometer - Digital/Analog       7. Three Phase Resistive Loading Bank         9. DC Shunt Motor Coupled With Three phase Alternator       10. Capacitor Bank         10. Single Phase Auto Transformer       5. Synchronous Induction Motor with Loading Arrangement         8. Three Phase Resistive Loading Bank       9. DC Shunt Motor Coupled With Three phase Alternator         10. Capacitor Bank       11. Single Phase Auto Transformer         11. Single Phase Auto Transformer       13. Single phase Auto Transformer         12. Single phase SCR based half controlled converter and fully controlled and meter       3. Single phase SCR based half controlled Converter and fully controlled and meter         13. Solution Transformer       9. Cocyclo converter kit with firing module       11. DC and C meters of required range         14. UP were Electronics and Drives Laboratory       10. Cyclo converter kit  |          |                                   |     |                                      |
| 41.       24. R. L. C. Bridge kit (with manual)         25.       Position Control Systems Kit (with manual)         26.       PID controller simulation and learner kit         27.       Personal computers with control system simulation packages         28.       I. DC Shunt Motor Coupled With Three phase Slip ring Induction motor         29.       Single Phase Induction Motor With Loading Arrangement         3.       Single Phase Resistive Loading Bank         4.       Three Phase Resistive Loading Bank         4.       Three Phase Resistive Loading Marangement         3.       Synchronous Induction motor 3HP         6.       Tachometer -Digital/Analog         7.       Three Phase Resistive Loading Bank         9.       DC Shunt Motor Coupled With Three phase Alternator         10.       Capacitor Bank         11.       Single Phase Induction Motor with Loading Arrangement         8.       Three Phase Resistive Loading Bank         9.       DC Shunt Motor Coupled With Three phase Alternator         10.       Capacitor Bank         11.       Single Phase Auto Transformer         12.       Single phase Auto Transformer         23.       Single phase SCR based half controlled converter and fully controlled converter along with latin'/sparate/fiting circuit/module and meter   |          |                                   |     |                                      |
| 41.       25.       Position Control Systems Kit (with manual)         26.       PID controller simulation and learner kit         27.       Personal computers with control system simulation packages         1.       DC Shunt Motor Coupled With Three phase Slip ring Induction motor         2.       Single Phase Induction Motor with Loading Arrangement         3.       Single Phase Resistive Loading Bank         4.       Three Phase Ratto Transformer         5.       Synchronous Induction motor 3HP         6.       Tachometer - Digital/Analog         7.       Three Phase Resistive Loading Bank         9.       DC Shunt Motor Coupled With Three phase Alternator         10.       Capacitor Bank         9.       DC Shunt Motor Coupled With Three phase Alternator         10.       Capacitor Bank         9.       DC Shunt Motor Coupled With Three phase Alternator         10.       Capacitor Bank         11.       Single phase Auto Transformer         12.       Single phase Auto Transformer         13.       Single phase Auto Transformer         14.       Single phase Auto Transformer         15.       Single phase Auto Transformer         16.       LCR meter         7.       Cathoder andy Oscilloscope <td></td> <td></td> <td></td> <td></td>  |          |                                   |     |                                      |
| 41.       26. PID controller simulation and learner kit         41.       Personal computers with control system simulation packages         41.       Electrical Machines Laboratory II       Single Phase Induction Motor with Loading Arrangement         3.       Single Phase Induction Motor with Loading Arrangement         3.       Single Phase Induction Motor with Loading Arrangement         3.       Single Phase Induction Motor With Coading Arrangement         4.       Three Phase Induction Motor With Loading Arrangement         7.       Three Phase Resistive Loading Bank         9.       DC Shunt Motor Coupled With Three phase Alternator         10.       Capacitor Bank         9.       DC Shunt Motor Coupled With Three phase Alternator         10.       Capacitor Bank         11.       Single Phase Auto Transformer         12.       Single Phase Auto Transformer         13.       Single Phase Auto Transformer         14.       Single Phase Auto Transformer         15.       Single Phase Auto Transformer         16.       Striched mode power converter and fully controlled converter and fully controlled converter and multi-in/separate/firing circui/module and meter         17.       Striched mode power converter module/Discrete Component         18.       Isolation Transformer <td< td=""><td></td><td></td><td></td><td></td></td<>  |          |                                   |     |                                      |
| 41.       27. Personal computers with control system simulation packages         41.       DC Shunt Motor Coupled With Three phase Slip ring Induction motor         2.       Single Phase Neticition Motor with Loading Arrangement         3.       Single Phase Resistive Loading Bank         4.       Three Phase Auto Transformer         5.       Synchronous Induction motor 3HP         6.       Tachometer - Digital/Analog         7.       Three Phase Resistive Loading Bank         9.       DC Shunt Motor Coupled With Three phase Alternator         10.       Capacitor Bank         11.       Single Phase Auto Transformer         12.       Soft Phase Resistive Loading Bank         9.       DC Shunt Motor Coupled With Three phase Alternator         10.       Capacitor Bank         11.       Single phase Auto Transformer         12.       Single phase Auto Transformer         13.       Single phase Auto Transformer         14.       Single phase Auto Transformer         15.       Single phase Auto Transformer         16.       Single phase Auto Transformer         17.       SCR & RTRIAC based 1 phase Act controller onverter and fully controlled converter and fully controlled converter and fully controlled converter and meter         16.       LCR meter   |          |                                   |     | -                                    |
| 41.       Image: Description of the second sec  |          |                                   |     |                                      |
| 41.       Electrical Machines Laboratory II       2. Single Phase Induction Motor with Loading Arrangement         41.       Electrical Machines Laboratory II       3. Single Phase Resistive Loading Bank         4.       Three Phase Auto Transformer         5.       Synchronous Induction Motor with Loading Arrangement         7.       Three Phase Resistive Loading Bank         9.       DC Shunt Motor Coupled With Three phase Alternator         10.       Capacitor Bank         11.       Single Phase Auto Transformer         12.       SCR &TRIAC based 1 phase AC controller along with lamp or rheostat load         2.       Single phase Auto transformer         3.       Single phase SCR based half controlled converter and fully controlled converter along with built-in/separate/firing circui/module and meter         4.       Switched mode power converter module/Discrete Component         5.       UCR meter         7.       Cathode ray Oscilloscope         8.       Isolation Transformer         9.       Opmonents (Inductance, Capacitance )         10.       Cyclo converter kit with firing module         11.       Drives Laboratory         12.       Drives Laboratory         13.       Drives Laboratory         14.       Drives Laboratory         15.  |          |                                   |     |                                      |
| 41.       Electrical Machines Laboratory II       2. Single Phase Induction Motor with Loading Arrangement         3.       Single Phase Induction Motor with Loading Arrangement         3.       Single Phase Resistive Loading Bank         4.       Three Phase Auto Transformer         5.       Synchronous Induction motor 3HP         6.       Tachometer -Digital/Analog         7.       Three Phase Induction Motor with Loading Arrangement         8.       Three Phase Resistive Loading Bank         9.       DC Shunt Motor Coupled With Three phase Alternator         10.       Capacitor Bank         11.       Single phase Auto Transformer         12.       Single phase Auto Transformer         13.       Single phase Auto Transformer         14.       Single phase Auto Transformer         15.       Single phase Auto Transformer         16.       Single phase Auto Transformer         17.       Single phase Auto Transformer         18.       Single phase Auto Transformer         19.       Single phase Auto Transformer  |          |                                   | 1.  |                                      |
| 41.       Electrical Machines Laboratory II       3. Single Phase Resistive Loading Bank<br>Three Phase Auto Transformer<br>5. Synchronous Induction motor 3HP<br>6. Tachometer - Digital/Analog<br>7. Three Phase Induction Motor with Loading Arrangement<br>8. Three Phase Induction Motor With Three phase Alternator<br>10. Capacitor Bank<br>9. DC Shunt Motor Coupled With Three phase Alternator<br>11. Single Phase Auto Transformer         42.       Power Electronics and<br>Drives Laboratory       1.       Single phase SCR based half controlled converter and fully<br>  |          |                                   | 2   |                                      |
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| 41.       Electrical Machines Laboratory II       5.       Synchronous Induction motor 3HP         6.       Tachometer -Digital/Analog       7.         7.       Three Phase Induction Motor with Loading Arrangement         8.       Three Phase Resistive Loading Bank       9.         9.       DC Shuut Motor Coupled With Three phase Alternator         10.       Capacitor Bank       11.         11.       Single Phase Auto Transformer       1.         22.       Single phase Auto transformer       3.         3.       Single phase SCR based half controlled converter and fully controlled converter along with built-in/separate/firing circuit/module and meter         4.       Switched mode power converter module/Discrete Component         5.       Work tables         6.       LCR meter         7.       Cathoder and Scilloscope         8.       Isolation Transformer         9.       Components (Inductance, Capacitance )         10.       Cycle converter kit with firing module         11.       Drives Laboratory         12.       Device characteristics(for SCR.MOSFET, TRIAC,GTO,IGCT and IGBT kit with built / discrete power supply and meters)         13.       DRIVES LABORATORY Dual regulated Dc power supply with common ground         14.       IGBT based single phase PW  |          | Electrical Machines Laboratory II |     |                                      |
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| 42.       Power Electronics and Drives Laboratory       7. Three Phase Induction Moor with Loading Arrangement         8.       Three Phase Resistive Loading Bank       9. DC Shunt Motor Coupled With Three phase Alternator         10.       Capacitor Bank       11. Single Phase Auto Transformer         11.       Single Phase Auto Transformer         12.       SCR & TRIAC based 1 phase AC controller along with lamp or rheostal load         2.       Single phase SCR based half controlled converter and fully controlled converter along with built-in/separate/firing circuit/module and meter         3.       Switched mode power converter module/Discrete Component         5.       Work tables         6.       LCR meter         7.       Cathode ray Oscilloscope         8.       Isolation Transformer         9.       Convorter kit with firing module         11.       Drives Laboratory         13.       DRIVES LABORATORY Dual regulated Dc power supply and meters)         13.       DRIVES LABORATORY Dual regulated Dc power supply with common ground         14.       IGBT based strue phase PWM inverter module/Discrete Component         15.       IGBT based step up and step down choppers(Built in/   | 11.      |                                   |     |                                      |
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| 42.       Power Electronics and         Drives Laboratory       10. Capacitor Bank         11. Single Phase Auto Transformer         12. Power Electronics and         Drives Laboratory  |          |                                   |     |                                      |
| 42.       Power Electronics and         Drives Laboratory       11. Single Phase Auto Transformer         11. SCR &TRIAC based 1 phase AC controller along with lamp or rheostat load         2.       Single phase Auto transformer         3.       Single phase SCR based half controlled converter and fully controlled converter along with built-in/separate/firing circuit/module and meter         42.       Power Electronics and         Drives Laboratory       0.         Cyclo converter kit with firing module         11. Single Phase Auto transformer         3. Single phase SCR based half controlled converter and fully controlled converter module/Discrete Component         5.       Work tables         6.       LCR meter         7.       Cathode ray Oscilloscope         8.       Isolation Transformer         9.       Components (Inductance, Capacitance )         10.       Cyclo converter kit with firing module         11.       Device characteristics(for SCR, MOSFET, TRIAC,GTO,IGCT and IGBT kit with builtin / discrete power supply and meters)         13.       DRIVES LABORATORY Dual regulated Dc power supply with common ground         14.       IGBT based single phase PWM inverter module/Discrete Component         15.       IGBT based step up and step down choppers(Built in/  |          |                                   |     |                                      |
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| <ul> <li>42. Power Electronics and Drives Laboratory</li> <li>43. Drives Laboratory</li> <li>44. Bower Electronics and Drives Laboratory</li> <li>45. Components (Inductance, Capacitance)</li> <li>46. Drives Laboratory</li> <li>47. In the set of the set</li></ul> | <u> </u> |                                   |     |                                      |
| <ul> <li>42. Power Electronics and Drives Laboratory</li> <li>Dives Laboratory</li> <li>2. Single phase Auto transformer</li> <li>3. Single phase SCR based half controlled converter and fully controlled converter along with built-in/separate/firing circuit/module and meter</li> <li>4. Switched mode power converter module/Discrete Component</li> <li>5. Work tables</li> <li>6. LCR meter</li> <li>7. Cathode ray Oscilloscope</li> <li>8. Isolation Transformer</li> <li>9. Components (Inductance, Capacitance )</li> <li>10. Cyclo converter kit with firing module</li> <li>11. DC and AC meters of required ranges</li> <li>12. Device characteristics(for SCR, MOSFET, TRIAC,GTO,IGCT and IGBT kit with builtin / discrete power supply and meters)</li> <li>13. DRIVES LABORATORY Dual regulated Dc power supply with common ground</li> <li>14. IGBT based single phase PWM inverter module/Discrete Component</li> <li>15. IGBT based three phase PWM inverter module/Discrete Component</li> <li>16. MOSFET based step up and step down choppers(Built in/</li> </ul>   |          |                                   |     |                                      |
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| 42.       Power Electronics and       controlled converter along with built-in/separate/firing circuit/module and meter         4.       Switched mode power converter module/Discrete Component         5.       Work tables         6.       LCR meter         7.       Cathode ray Oscilloscope         8.       Isolation Transformer         9.       Components (Inductance, Capacitance )         10.       Cyclo converter kit with firing module         11.       DC and AC meters of required ranges         12.       Device characteristics(for SCR, MOSFET, TRIAC,GTO,IGCT and IGBT kit with builtin / discrete power supply and meters)         13.       DRIVES LABORATORY Dual regulated Dc power supply with common ground         14.       IGBT based single phase PWM inverter module/Discrete Component         15.       IGBT based sthree phase PWM inverter module/Discrete Component         16.       MOSFET based step up and step down choppers(Built in/  |          |                                   |     |                                      |
| <ul> <li>42. Power Electronics and Drives Laboratory</li> <li>43. Bower Electronics and Drives Laboratory</li> <li>44. Switched mode power converter module/Discrete Component</li> <li>5. Work tables</li> <li>6. LCR meter</li> <li>7. Cathode ray Oscilloscope</li> <li>8. Isolation Transformer</li> <li>9. Components (Inductance, Capacitance )</li> <li>10. Cyclo converter kit with firing module</li> <li>11. DC and AC meters of required ranges</li> <li>12. Device characteristics(for SCR, MOSFET, TRIAC,GTO,IGCT and IGBT kit with builtin / discrete power supply and meters)</li> <li>13. DRIVES LABORATORY Dual regulated Dc power supply with common ground</li> <li>14. IGBT based single phase PWM inverter module/Discrete Component</li> <li>15. IGBT based three phase PWM inverter module/Discrete Component</li> <li>16. MOSFET based step up and step down choppers(Built in/</li> </ul>  |          |                                   |     |                                      |
| 42.Power Electronics and<br>Drives Laboratory4.Switched mode power converter module/Discrete Component<br>5.<br>Work tables<br>6.<br>ICR meter<br>7.<br>Cathode ray Oscilloscope<br>8.<br>Isolation Transformer<br>9.<br>Components (Inductance, Capacitance )<br>10.<br>Cyclo converter kit with firing module<br>11.<br>DC and AC meters of required ranges<br>12.<br>Device characteristics(for SCR, MOSFET, TRIAC,GTO,IGCT<br>and IGBT kit with builtin / discrete power supply and meters)<br>13.<br>DRIVES LABORATORY Dual regulated Dc power supply with<br>common ground<br>14.<br>IGBT based single phase PWM inverter module/Discrete<br>Component<br>15.<br>IGBT based three phase PWM inverter module/Discrete<br>Component<br>16.<br>MOSFET based step up and step down choppers(Built in/   |          |                                   |     |                                      |
| <ul> <li>42. Power Electronics and<br/>Drives Laboratory</li> <li>5. Work tables</li> <li>6. LCR meter</li> <li>7. Cathode ray Oscilloscope</li> <li>8. Isolation Transformer</li> <li>9. Components (Inductance, Capacitance )</li> <li>10. Cyclo converter kit with firing module</li> <li>11. DC and AC meters of required ranges</li> <li>12. Device characteristics(for SCR, MOSFET, TRIAC,GTO,IGCT<br/>and IGBT kit with builtin / discrete power supply and meters)</li> <li>13. DRIVES LABORATORY Dual regulated Dc power supply with<br/>common ground</li> <li>14. IGBT based single phase PWM inverter module/Discrete<br/>Component</li> <li>15. IGBT based three phase PWM inverter module/Discrete<br/>Component</li> <li>16. MOSFET based step up and step down choppers(Built in/</li> </ul>  |          |                                   | 4.  |                                      |
| <ul> <li>42. Power Electronics and Drives Laboratory</li> <li>6. LCR meter</li> <li>7. Cathode ray Oscilloscope</li> <li>8. Isolation Transformer</li> <li>9. Components (Inductance, Capacitance)</li> <li>10. Cyclo converter kit with firing module</li> <li>11. DC and AC meters of required ranges</li> <li>12. Device characteristics(for SCR, MOSFET, TRIAC,GTO,IGCT and IGBT kit with builtin / discrete power supply and meters)</li> <li>13. DRIVES LABORATORY Dual regulated Dc power supply with common ground</li> <li>14. IGBT based single phase PWM inverter module/Discrete Component</li> <li>15. IGBT based three phase PWM inverter module/Discrete Component</li> <li>16. MOSFET based step up and step down choppers(Built in/</li> </ul>   |          |                                   |     |                                      |
| <ul> <li>42. Power Electronics and Drives Laboratory</li> <li>43. Drives Laboratory</li> <li>44. Drives Laboratory</li> <li>45. Drives Laboratory</li> <li>46. MOSFET based step up and step down choppers(Built in/</li> </ul>   |          |                                   |     |                                      |
| <ul> <li>42. Power Electronics and<br/>Drives Laboratory</li> <li>8. Isolation Transformer</li> <li>9. Components (Inductance, Capacitance )</li> <li>10. Cyclo converter kit with firing module</li> <li>11. DC and AC meters of required ranges</li> <li>12. Device characteristics(for SCR, MOSFET, TRIAC,GTO,IGCT<br/>and IGBT kit with builtin / discrete power supply and meters)</li> <li>13. DRIVES LABORATORY Dual regulated Dc power supply with<br/>common ground</li> <li>14. IGBT based single phase PWM inverter module/Discrete<br/>Component</li> <li>15. IGBT based three phase PWM inverter module/Discrete<br/>Component</li> <li>16. MOSFET based step up and step down choppers(Built in/</li> </ul>   |          |                                   |     |                                      |
| <ul> <li>Drives Laboratory</li> <li>Dives Laboratory</li> <li>10. Cyclo converter kit with firing module</li> <li>11. DC and AC meters of required ranges</li> <li>12. Device characteristics(for SCR, MOSFET, TRIAC,GTO,IGCT and IGBT kit with builtin / discrete power supply and meters)</li> <li>13. DRIVES LABORATORY Dual regulated Dc power supply with common ground</li> <li>14. IGBT based single phase PWM inverter module/Discrete Component</li> <li>15. IGBT based three phase PWM inverter module/Discrete Component</li> <li>16. MOSFET based step up and step down choppers(Built in/</li> </ul>   |          |                                   | 8.  |                                      |
| Drives Laboratory       10. Cyclo converter kit with firing module         11. DC and AC meters of required ranges       12. Device characteristics(for SCR, MOSFET, TRIAC,GTO,IGCT and IGBT kit with builtin / discrete power supply and meters)         13. DRIVES LABORATORY Dual regulated Dc power supply with common ground       14. IGBT based single phase PWM inverter module/Discrete Component         15. IGBT based three phase PWM inverter module/Discrete Component       16. MOSFET based step up and step down choppers(Built in/  | 42.      | Power Electronics and             | 9.  | Components (Inductance, Capacitance) |
| <ul> <li>11. DC and AC meters of required ranges</li> <li>12. Device characteristics(for SCR, MOSFET, TRIAC,GTO,IGCT and IGBT kit with builtin / discrete power supply and meters)</li> <li>13. DRIVES LABORATORY Dual regulated Dc power supply with common ground</li> <li>14. IGBT based single phase PWM inverter module/Discrete Component</li> <li>15. IGBT based three phase PWM inverter module/Discrete Component</li> <li>16. MOSFET based step up and step down choppers(Built in/</li> </ul>  |          | Drives Laboratory                 | 10. |                                      |
| <ol> <li>Device characteristics(for SCR, MOSFET, TRIAC,GTO,IGCT<br/>and IGBT kit with builtin / discrete power supply and meters)</li> <li>DRIVES LABORATORY Dual regulated Dc power supply with<br/>common ground</li> <li>IGBT based single phase PWM inverter module/Discrete<br/>Component</li> <li>IGBT based three phase PWM inverter module/Discrete<br/>Component</li> <li>IGBT based step up and step down choppers(Built in/</li> </ol>   |          |                                   |     |                                      |
| <ul> <li>and IGBT kit with builtin / discrete power supply and meters)</li> <li>13. DRIVES LABORATORY Dual regulated Dc power supply with common ground</li> <li>14. IGBT based single phase PWM inverter module/Discrete Component</li> <li>15. IGBT based three phase PWM inverter module/Discrete Component</li> <li>16. MOSFET based step up and step down choppers(Built in/</li> </ul>  |          |                                   |     |                                      |
| <ul> <li>13. DRIVES LABORATORY Dual regulated Dc power supply with common ground</li> <li>14. IGBT based single phase PWM inverter module/Discrete Component</li> <li>15. IGBT based three phase PWM inverter module/Discrete Component</li> <li>16. MOSFET based step up and step down choppers(Built in/</li> </ul>   |          |                                   |     |                                      |
| <ul> <li>common ground</li> <li>14. IGBT based single phase PWM inverter module/Discrete<br/>Component</li> <li>15. IGBT based three phase PWM inverter module/Discrete<br/>Component</li> <li>16. MOSFET based step up and step down choppers(Built in/</li> </ul>   |          |                                   | 13. |                                      |
| <ul> <li>14. IGBT based single phase PWM inverter module/Discrete<br/>Component</li> <li>15. IGBT based three phase PWM inverter module/Discrete<br/>Component</li> <li>16. MOSFET based step up and step down choppers(Built in/</li> </ul>  |          |                                   |     |                                      |
| Component<br>15. IGBT based three phase PWM inverter module/Discrete<br>Component<br>16. MOSFET based step up and step down choppers(Built in/  |          |                                   | 14. |                                      |
| <ul> <li>15. IGBT based three phase PWM inverter module/Discrete Component</li> <li>16. MOSFET based step up and step down choppers(Built in/</li> </ul>  |          |                                   |     |                                      |
| Component<br>16. MOSFET based step up and step down choppers(Built in/  |          |                                   | 15. |                                      |
| 16. MOSFET based step up and step down choppers(Built in/   |          |                                   |     |                                      |
| Discrete)   |          |                                   | 16. |                                      |
|   |          |                                   |     | Discrete)                            |

|         |                                    | 17. Multimeter   |
|---------|------------------------------------|--|
|         |                                    | 18. Rheostats of various ranges  |
|         |                                    | 1. AC & DC motor with Controller   |
|         |                                    | 2. 8255 Interface board  |
|         |                                    | 3. 8254 timer counter  |
|         |                                    | 4. 8251 Interface board  |
| 43.     | Microprocessor and Microcontroller | 5. Trainer with Power Supply   |
|         | Laboratory                         | 6. 8051 Micro Controller Trainer Kit with power supply                                   |
|         | Laboratory                         | 7. 8259 Interface board  |
|         |                                    | 8. Traffic Light Control System  |
|         |                                    | 9. ADC and DAC card  |
|         |                                    | 10. 8279 Keyboard / Display Interface board  |
|         |                                    | 1. Flexure testing machine   |
|         |                                    | 2. Aggregate Crushing Value Apparatus  |
|         |                                    | 3. Aggregate Impact Value Apparatus  |
|         |                                    | 4. Beam Mould  |
|         |                                    |  |
|         |                                    | 5. Compaction factor apparatus   |
|         |                                    | 6. Compression testing machine   |
|         |                                    | 7. Concrete  |
|         |                                    | 8. Concrete Cylinders  |
|         |                                    | 9. Concrete mixing machine   |
|         |                                    | 10. Cylindrical metal measure of 3 litre capacity  |
|         |                                    | 11. IS sieves 12.5 mm, 10 mm and 2.36 mm   |
| 44.     |                                    | 12. IS Sieves 40 mm, 31.5 mm, 25 mm, 20mm, 16mm, 12.5 mm,                                |
|         | Construction Materials Laboratory  | 10mm, 6.3 mm   |
|         |                                    | 13. Length gauge   |
|         |                                    | 14. Oven   |
|         |                                    | 15. Pycnometer   |
|         |                                    | 16. Shallow flat bottom dish   |
|         |                                    | 17. Sieve set (IS sieves 4.75 mm, 2.36 mm, 1.1.8 mm, 600 micron,                         |
|         |                                    | 300 micron, 150 micron and 75 micron )   |
|         |                                    | 18. Slump cone apparatus   |
|         |                                    | 19. Tamping rod  |
|         |                                    | 20. Thickness gauge  |
|         |                                    | 21. Trowels and Pans   |
|         |                                    | 22. Weighing Balance or scale (accuracy 0.5g)  |
|         |                                    | 23. Weighing Balance or scale (accuracy 1 g)   |
|         |                                    | 1. PCs   |
| 45.     | Security Laboratory                | <ol> <li>I Cs</li> <li>GnuPG, KF sensor or equivalent, snort, Net Stumbler or</li> </ol> |
|         | Security Eulooratory               | -  |
|         |                                    | equivalent   |
| 46.     | Grid and Cloud Computing           | 1. PCs   |
|         | Laboratory                         | 2. Globus Toolkit or equivalent Eucalyptus or open Nebula or                             |
|         | Laboratory                         | equivalent   |
| 47.     | Embaddad Laboratory                | 1. Embedded trainer kits with ARM board  |
|         | Embedded Laboratory                | 2. Embedded trainer kits suitable for wireless communication                             |
|         |                                    | 1. Compliers C,C++,VB,VC++   |
|         |                                    | -  |
| 48.     | Power System Simulation            |  |
| 40.     | •                                  | 3. Personal computers(Pentium-IV, 80GB, 512 MB RAM)                                      |
|         | Laboratory                         | 4. Dot matrix  |
|         |                                    | 5. Server (Pentium IV, 80GB, IGB RAM) (High speed processor)                             |
|         |                                    | 6. Printer laser   |
|         |                                    | 1. Color Desk Jet Printer  |
| 49.     |                                    | 2. Computer Work Station   |
| · · · · | Simulation and Analysis Laboratory | 3. Multibody Dynamic software suitable for Mechanism simulation                          |
|         |                                    | and analysis   |
|         |                                    | 4. C/MATLAB  |
| 50.     |                                    | 1. Computers with necessary accessories  |
| 50.     | Computer Aided Machine Drawing     | 2. Printer   |
|         |                                    | 3. Assembly drawings using any 2D/3D CAD software  |
| -       | •                                  |  |

## (d) SOFTWARES AVAILABLE

| Software             | Available                                      |
|----------------------|--|
| System software      | 1. LINUX                                       |
|                      | 2. UBUNTU                                      |
|                      | 3. windows server                              |
| Application Software | 1. clarity English success curriculum based    |
|                      | English learning                               |
|                      | 2. soft skills and personality development     |
|                      | 3. euro talk learn English business collection |
|                      | 4. c   |
|                      | 5. java  |
|                      | 6. apache tomcat 8.1                           |
|                      | 7. modern lib                                  |
|                      | 8. android studio                              |
|                      | 9. Mozilla                                     |
|                      | 10. open gl                                    |
|                      | Application Software -(Twenty)                 |
|                      | 11. ns2  |
|                      | 12. opnet                                      |
|                      | 13. blender                                    |
|                      | 14. inkscape                                   |
|                      | 15. netbeans                                   |
|                      | 16. php  |
|                      | 17. gimp                                       |
|                      | 18. pearl                                      |
|                      | 19. qcad                                       |
|                      | 20. k3b  |

#### (e) NETWORK CONNECTIVITY

| Available Bandwidth                      | 100 Mbps |
|--|----------|
| Number of nodes with Internet connection | 420      |

## 15. FUNDS RECEIVED FROM AICTE I UGC XII PLAN ONWARDS

| S.No | Name of the<br>Funding<br>Agency | Name of the<br>Scheme  | Amount<br>Sanctioned<br>(Rs.) | Amount<br>Release<br>d so far<br>(Rs) | Present<br>Status   | Remarks,<br>if any |
|------|----------------------------------|--|-------------------------------|---------------------------------------|---|--------------------|
| 1.   | DST/SERB<br>(Ongoing)            | Empowerme<br>nt and Equity<br>opportunities<br>for<br>Excellence in<br>Science<br>(EMEQ) | 2973200                       | 1900100                               | Present<br>status:<br>suppliers<br>short listed<br>and waiting<br>for DOTE<br>approval for<br>the purchase<br>of equipment. | -                  |

## **16. MoU WITH COMPANIES**

| Sl. No. | Company Name   |
|---------|--|
| 1       | Microturn IT Services Private Limited, Chennai - 600126                      |
| 2       | WiseTech Source Private Limited, Chennai 600032                              |
| 3       | Entrust Technoservices Private Limited, Trichy - 620001                      |
| 4       | Active Energy Solution, Erode  |
| 5       | Irrigation Management Training Institute, Thuvakudi,                         |
|         | Trichy - 620 015   |
| 6       | CADD Centre Training Services Private Limited, Trichy – 620017 (CSE Dept.)   |
| 7       | CADD Centre Training Services Private Limited, Trichy – 620001 (CIVIL Dept.) |
| 8       | Pantech ProEd Private Limited, Trichy  |
| 9       | Vi Microsystems Private Limited, Chennai – 600096                            |
| 10      | Rane Brake Lining Limited, Trichy  |
| 11      | Nagu Hospital, Trichy - 620012   |

## **17. NBA ACCREDITATION STATUS**

| 1 | Name/ List of Programmes/ Courses<br>Accredited | NIL  |
|---|---|--|
| 2 | Applied for Accreditation                       | NIL  |
|   | A. Applied but Visit not happened               | NIL  |
|   | B. Visit happened but result awaited            | NIL  |
| 3 | List of programmes/ courses Not<br>Applied      | Civil Engineering<br>Mechanical Engineering<br>Electrical and Electronics Engineering<br>Electronics and Communication Engineering<br>Computer Science and Engineering |

## **18. NAAC ACCREDITATION STATUS**

| 1 | Accredited                           | NIL   |
|---|--------------------------------------|---|
| 2 | Applied for Accreditation            | NIL   |
|   | A. Applied but Visit not happened    | NIL   |
|   | B. Visit happened but result awaited | NIL   |
| 3 | Not Applied                          | Civil Engineering<br>Mechanical Engineering |
|   |                                      | Electrical & Electronics Engineering        |
|   |                                      | Electronics & Communication Engineering     |
|   |                                      | Computer Science & Engineering              |